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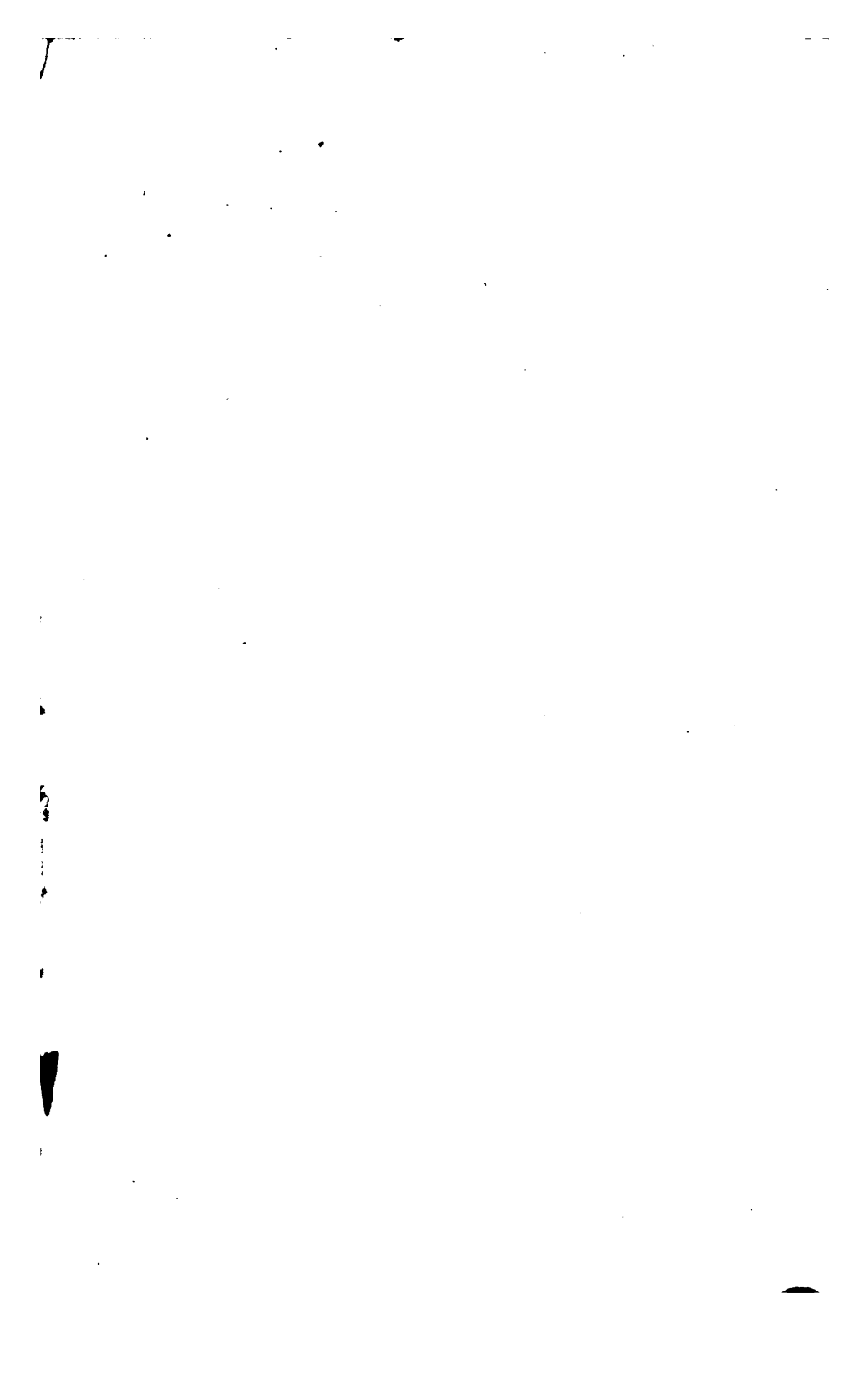
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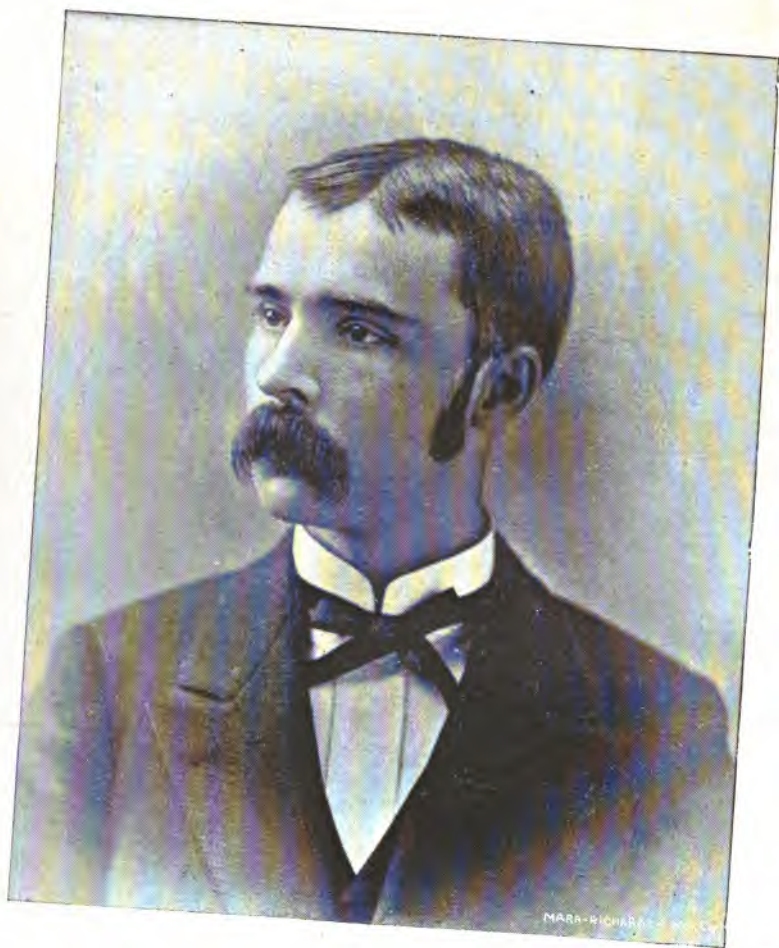
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Wm. N. Edwards

# PROCEEDINGS

OF THE

## Wisconsin Pharmaceutical Ass'n,

HELD AT

Appleton, August 12, 13, 14, 1890.

ELEVENTH ANNUAL MEETING.

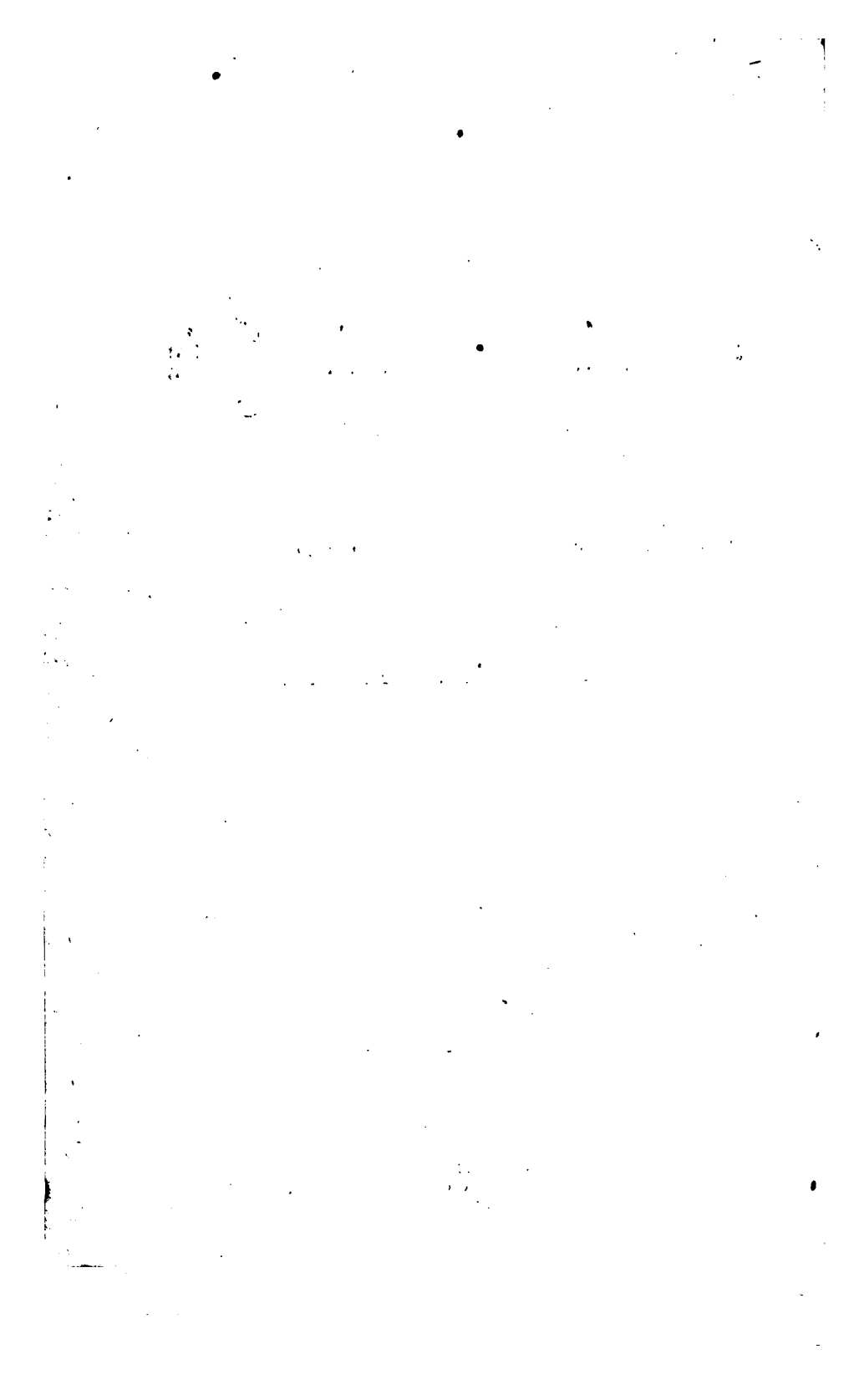
ALSO, THE

ROLL OF MEMBERS,

TOGETHER WITH THE NINTH REPORT OF THE WISCONSIN  
STATE BOARD OF PHARMACY.



JANESVILLE, WIS.:  
GAZETTE PRINTING COMPANY, PRINTERS.  
1890.



## IMPORTANT MEMORANDA.

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When you wish to know anything about arrearages of dues, or when you desire to pay dues, write to W. P. CLARKE, Treasurer, Milton.

If you wish to become a member, or obtain membership for another, or for general information regarding the Association, or the obtaining of certificates of membership, address E. B. HEIMSTREET, Secretary, Janesville.

In case of death of a member coming to your notice, advise the Secretary of the occurrence, giving such particulars as may be desirable to publish.

If you find your name spelled wrongly, or your address erroneously given, notify the Secretary at once.

If, at any time during the year you change your place of business, advise the Secretary.

The Wisconsin Pharmaceutical Association has nothing to do with the enforcement of the laws regulating pharmacy. All communications made in compliance with the law, or applications for registration under the law, must be sent to the State Board of Pharmacy, of which body E. B. HEIMSTREET, of Janesville, is Secretary.

If you desire information about the Department of Pharmacy of the State University, write to Prof. F. B. POWER, Madison.

If you have doubt about the purity of a drug or drugs, send them to Prof. THOM, Madison.

If you wish information in regard to space for exhibit, etc., write to JOHN KIENH, of Milwaukee, local secretary.

THE NEXT ANNUAL MEETING WILL BE HELD AT MILWAUKEE, AUGUST 4, 5, 6, 1891.

# LIST OF OFFICERS

OF THE ASSOCIATION SINCE ITS ORGANIZATION (DECEASED  
IN ITALICS.)

## PRESIDENTS.

John A. Dadd, Milwaukee.....	1880-81	Fred Robinson, Kenosha.....	1881-82
George Bauman, Oshkosh.....	1882-83	Edwin Sumner, Madison.....	1883-84
George Howard, La Crosse.....	1884-85	F. F. Prentice, Janesville.....	1885-86
F. M. Givens, Fond du Lac.....	1886-87	R. D. Pulford, Mineral Point.....	1887-88
J. C. Huber, Fond du Lac.....	1888-89	W. M. Edwards, Portage.....	1889-90
R. Saurhering, Mayville.....	1890-91		

## VICE PRESIDENTS.

A. H. Hollister, Madison.....	1880-81	J. C. Huber, Fond du Lac.....	1880-81
G. W. Wright, Platteville.....	1880-81	George Howard, La Crosse.....	1880-84
<i>John Bauman</i> , Oshkosh.....	1880-81	H. B. Allen, Richland Center.....	1880-81
John Robinson, Green Bay.....	1880-81	Adam Conrath, Milwaukee.....	1881-82
F. F. Prentice, Janesville.....	1881-82	Fred Wolfrum, West Bend.....	1881-82
W. G. Spence, Mauston.....	1881-82	R. Sauerhering, Mayville.....	1881-82
J. A. Farnham, Fennimore.....	1881-82	A. Trayser, New London.....	1881-82
George Bauman, Oshkosh.....	1881-82	R. D. Pulford, Mineral Point.....	1882-86
<i>T. J. Hooper</i> , Platteville.....	1882-83	J. C. Huber, Fond du Lac.....	1883-84
H. J. Goddard, Chippewa Falls.....	1884-85	James Morrison, New Lisbon..	1884-85
H. C. Schranck, Milwaukee.....	1885-86	W. M. Edwards, Portage.....	1886-17
John Kienth, Milwaukee.....	1887-88	A. C. Whitman, Hurley.....	1887-88
Henry Rollman, Chilton.....	1888-89	F. W. Isham, Elkhorn.....	1888-89
Jas. Morrison, New Lisbon.....	1889-90	J. W. Coon, Tomahawk.....	1889-90
C. S. Little, Appleton.....	1890-91	J. M. Evans, M. D., Evansville..	1890-91

## TREASURERS.

A. J. Roberts, Janesville.....	1880-82	W. P. Clarke, Milton.....	1882-82
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## LOCAL SECRETARIES.

Henry C. Schranck, Milwaukee..	1880-81	<i>L. A. Schultz</i> , Oshkosh.....	1881-82
J. F. W. Schmidt, Oshkosh.....	1881-82	T. H. Spence, La Crosse.....	1882-83
Charles H. Avery, Madison.....	1883-84	F. F. Prentice, Janesville.....	1884-85
F. M. Givens, Fond du Lac.....	1885-86	Adam Conrath, Milwaukee.....	1886-87
Charles F. Yates, Palmyra.....	1887-88	W. M. Edwards, Portage.....	1888-89
C. S. Little, Appleton.....	1889-90	John Kienth, Milwaukee.....	1890-91

## PERMANENT SECRETARY.

E. B. Heimstreet, Janesville.....	1890-91
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# WISCONSIN BOARD OF PHARMACY.

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A. CONRATH, Milwaukee.....	Term expires April 12th, 1891
E. B. HEIMSTREET, Janesville.....	Term expires April 12th, 1892
C. R. BECHMANN, Fountain City.....	Term expires April 12th, 1893
R. D. PULFORD, Mineral Point.....	Term expires April 12th, 1894
F. ROBINSON, Kenosha.....	Term expires April 12th, 1895

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## OFFICERS OF BOARD, 1889.

PRESIDENT.....	ADAM CONRATH, Milwaukee
SECRETARY AND TREASURER.....	E. B. HEIMSTREET, Janesville

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## NOMINATIONS SENT TO THE GOVERNOR.

*1892, to fill the vacancy of T. H. Spence.*

J. C. HUBER, Fond du Lac; H. C. SCHRANCK, Milwaukee; John CADMAN,  
Stevens Point.

T. H. SPENCE reappointed for five years.

---

*1893, to fill vacancy of A. H. Hollister.*

JOHN ROBINSON, Green Bay; A. H. HOLLISTER, Madison; T. H. SPENCE,  
La Crosse.

A. H. HOLLISTER reappointed for five years.

---

*1894, to fill vacancy of F. Robinson.*

JOHN A. DADD, Milwaukee; F. ROBINSON, Kenosha; J. C. HUBER, Fond du Lac.  
F. ROBINSON reappointed for five years.

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*1895, to fill vacancy of A. Conrath.*

ADAM CONRATH, H. C. SCHRANCK, JOHN A. DADD, Milwaukee.  
ADAM CONRATH reappointed for five years.

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*1896, to fill vacancy of E. B. Heimstreet.*

E. B. HEIMSTREET, F. F. PRENTCE, Janesville; C. A. EMERSON, Beloit.  
E. B. HEIMSTREET reappointed for five years.

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*1897, to fill vacancy of T. H. Spence.*

W. M. EDWARDS, Portage; CHARLES BECHMANN, Fountain City; J. C. HUBER,  
Fond du Lac.

CHARLES R. BECHMANN appointed for five years.

---

*1898, to fill vacancy of A. H. Hollister.*

R. D. PULFORD, Mineral Point; A. A. PARDEE, Madison; J. C. HUBER,  
Fond du Lac.

R. D. PULFORD appointed for five years.

---

*1899, to fill vacancy of F. Robinson.*

F. ROBINSON, Kenosha; J. C. HUBER, Fond du Lac; F. M. GIVENS,  
Fond du Lac.

F. ROBINSON appointed for five years.

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*1890, to fill vacancy of A. Conrath.*

JOHN KIENTH, H. G. RUENZEL, H. C. SCHRANCK, Milwaukee.

## CODE OF ETHICS.

ADOPTED 1890.

The members of the Wisconsin Pharmaceutical Association, considering it necessary that some mutual understanding should exist in regard to the moral principles guiding them in their profession, hereby agree upon the following code of ethics

1. We accept the U. S. Pharmacopœia as our standard and guide for all official preparations, and recognize a variance from its rules only in exceptional cases where sufficient authority has proved some other process more reliable to attain the same end. (This section is not intended to interfere with the dispensing of preparations or medicines ordered in accordance with foreign pharmacopœias)

2. We discountenance all secret formula between physician and pharmacist, and consider it our duty to communicate such to each other when requested.

3. We distinctly repudiate the practice of allowing physicians a percentage in any form, on their prescriptions or patronage, as being derogatory to both professions, which practice is unjustly at the expense of the suffering parties.

4. We will endeavor, as far as possible, to refrain from compromising the professional reputation of any physician, and expect, in return, the same courtesy from him.

5. As the apothecary should be able to distinguish between good and bad drugs, in most cases, and as the substitution of a weak or inert for an active one may, negatively, be productive of serious consequences, we hold that the sale of impure drugs or medicines, from motives of competition or desire of gain, when pure articles of the same kind may be obtained, is highly culpable and that it is the duty of every honest apothecary or druggist to expose all such fraudulent acts as may come to his knowledge.

6. The apothecary should be remunerated by the public for his knowledge and skill, and his charges should be regulated by the time consumed in preparation as well as by the value of the article sold. Although local and other circumstances necessarily affect the rate of charges at different establishments, no apothecary should intentionally undersell his neighbors with a view to their injury.

STATE OF WISCONSIN.

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7. Recognizing the value of alcohol as a therapeutic agent, and the propriety of its being dispensed as such by pharmacists, yet deploring the wide-spread evil resulting from its intemperate use in its hundred insidious forms, we condemn any attempt to make it a prominent feature of our business as unprofessional, and we denounce the loose practice of allowing it to be used on the premises in any shape as a beverage as degrading, and we urge upon pharmacists the duty of exercising at all times a conscientious care in dispensing a drug liable to such dangerous abuse.

8. Believing that some means should be adopted to enforce the provisions of this Code, violations of the same may be reported at any annual meeting of this Association, when the accused may be heard in his own defence, when, if found guilty, he may be censured, suspended or expelled by a vote of two-thirds of the members present.

## LIST OF QUERIES.

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Your committee on Queries and papers beg leave to report as follows:

1. Examine and report on the official solution of Ferrie Chloride as found in retail and supplied by wholesale stores—State if it contains Ferrous Chlor. or free Nitric Acid and give percentage of Ferrie Chlor. and free Hydrochloric Acid. C. H. Bernhard, Madison.
2. What are the advantages of or the objections to trade exhibitions in connections with meetings of the State Pharmaceutical Association? What position should this association take toward exhibitors? W. P. Clark, Milton.
3. What course of instruction should the apprentice receive from his employer to fit him for entrance to a school of Pharmacy? Frank Pittman, Mineral Point.
4. What substitute have we for Acacia that will fill all the requirements for Mucilage? H. D. Sykes, Milwaukee.
5. What chemicals can the retail druggist advantageously prepare on a small scale, with such simple apparatus as may be found in any well equipped drug store? A. E. Mieding, Milwaukee.
6. Is the Pharmacist justifiable in substituting his own preparations for proprietary specialties? Dr. J. W. Stevens, Prairie du Sac.
7. The Cocaine habit—to what extent, if any, does it exist in this state? J. W. Coon, Tomahawk.
8. To what extent is the Metric System used by Physicians in writing Prescriptions in Wisconsin? T. H. Spence, La Crosse.
9. Are there any Medical Plants indigenous to this state that have not yet received notice? C. R. Bechmann, Fountain City.
10. Is it desirable to recommend non-secret medicines to replace patent medicines? F. E. Grimmer, Mauston.
11. What is the quality of the Rhubarb supplied to the public by the retail druggists of the State? C. H. Avery, Madison.

STATE OF WISCONSIN.

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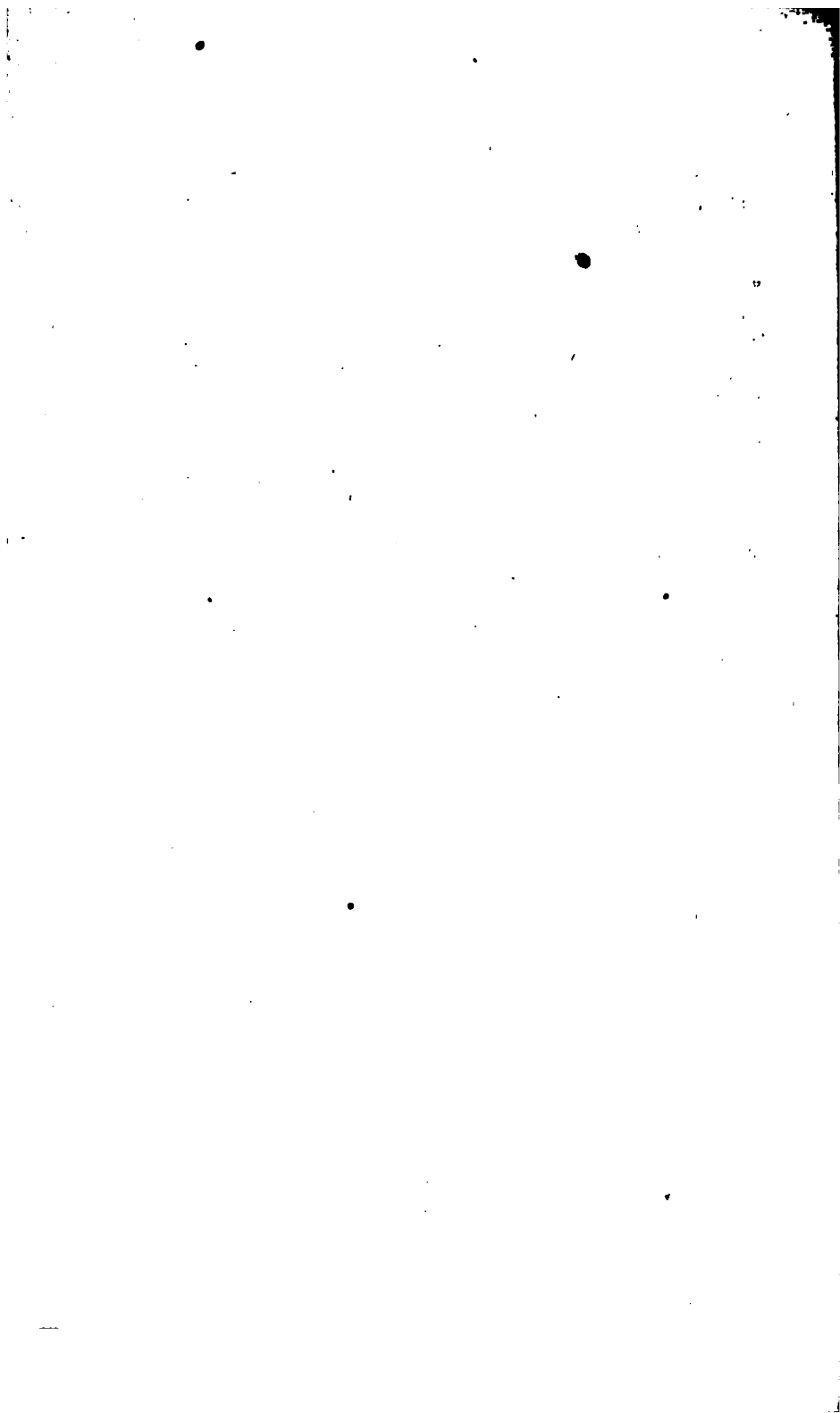
12. What is the best system of filing and preserving physicians' prescriptions? O. H. Woodward, Kenosha.

13. White wax adulterated with paraffin is in the market; to what extent is this the case? W. L. Sanner, Waukesha.

14. What is the average amount of impurity in aloes, and what is the character of such impurity? E. Saurhering, Mayville.

15. Assays of Powdered Opium and of Tincture of Nux Vomica as dispensed in different localities of the State, are desired. Adam Conrath, Milwaukee; H. B. Eberle, Watertown; A. S. Mitchell, Milwaukee.

We wish it to be thoroughly understood that the queries are not intended to be confined solely to those who may accept them. They are free for all and we earnestly request the members to make an effort toward answering them and contributing papers for our meeting next year.



# OFFICERS AND COMMITTEES.

FOR 1890-91.

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President—R. SAUERHERING, Mayville.

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First Vice-President—C. S. LITTLE, Appleton.

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Second Vice President—DR. J. M. EVANS, Evansville.

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Permanent Secretary—E. B. HEIMSTREET, Janesville.

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Local Secretary—JOHN KIETH, Milwaukee.

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Treasurer—W. P. CLARKE, Milton.

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*Next Meeting at Milwaukee, Aug 4 5, 6, 1891*

## COMMITTEES.

EXECUTIVE—W. F. Montgomery, Appleton; W. G. Spence, Chippewa Falls; Geo. Howard, La Crosse; F. E. Grimmer, Sr., Mauston; F. D. Naber, Shawano.

ADULTERATIONS—C. C. Sniteman, Neilsville; F. F. Prentice, Janesville; B. D. Merrill, Portage; T. H. Spence, La Crosse; R. D. Pulford, Mineral Point; H. M. G. Blestren, Eau Claire.

LEGISLATION—A. H. Hollister, Madison; C. Widule, Milwaukee; J. C. Huber, Fond du Lac; F. Robinson, Kenosha.

QUERIES AND PAPERS—T. M. Canfield, M. D., Necedah; J. A. Froelich, Oshkosh; H. D. Sykes, Milwaukee.

ENTERTAINMENT—H. H. Sykes, Milwaukee; Max Gessler, Milwaukee; A. Brown, Milwaukee.

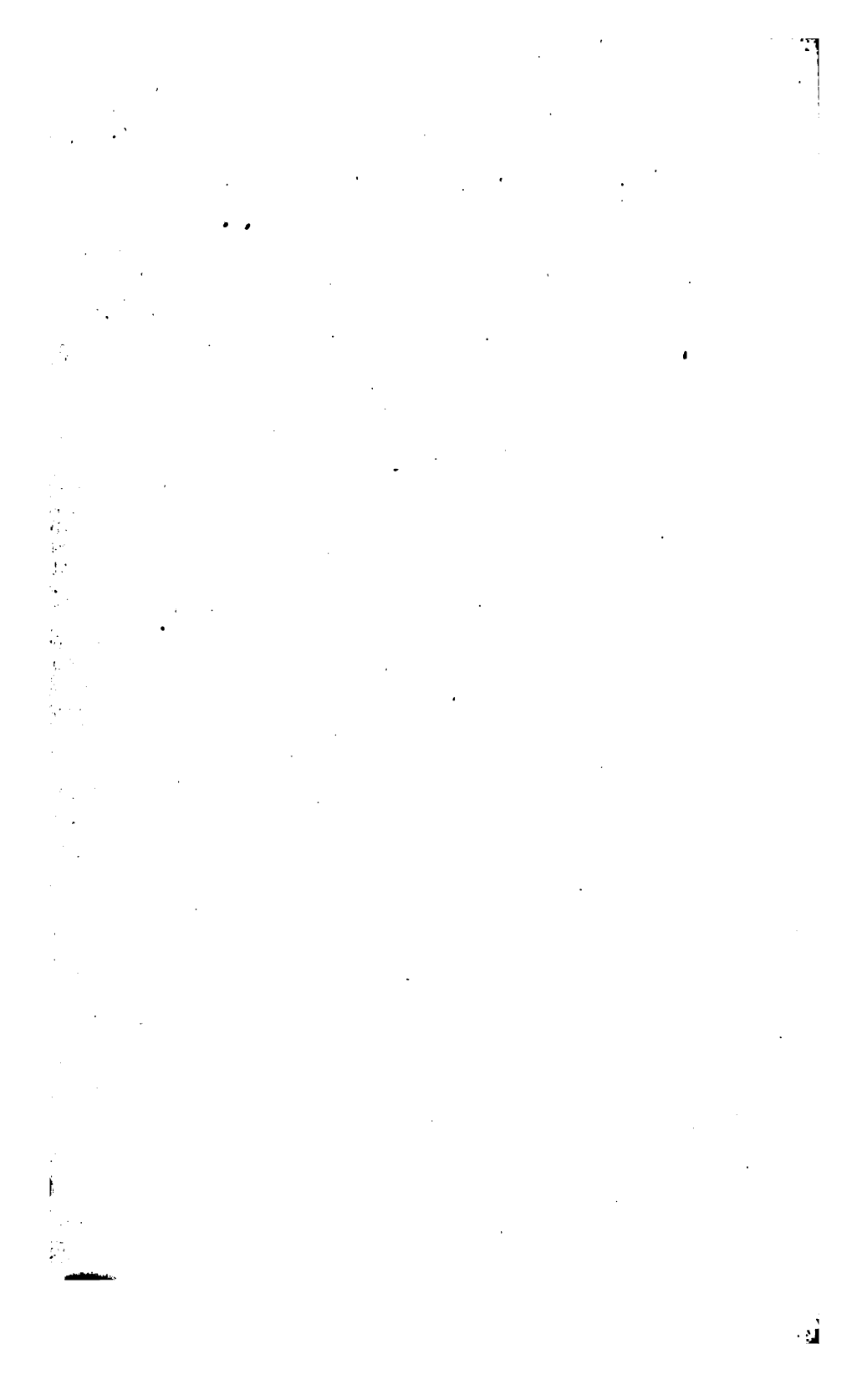
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## DELEGATES.

TO MEETING OF AMERICAN PHARMACEUTICAL ASSOCIATION, 1890.—Prof. F. B. Power, Madison; C. C. Sniteman, Neilsville; C. S. Little, Appleton; J. A. Dadd, Milwaukee; C. H. Bernhard, Madison.

TO STATE MEDICAL ASSOCIATION, JUNE, 1891.—A. A. Pardee, Madison; J. M. Evans, Evansville; R. D. Pulford, Mineral Point; J. A. Hawes, Appleton.

TO STATE ELECTIC MEDICAL ASSOCIATION, JUNE, 1891.—R. Sauerhering, Mayville; O. K. Ranum, Menomonie; H. Rollman, Chilton.





MINUTES  
OF THE  
ELEVENTH ANNUAL MEETING,  
HELD AT  
APPLETON, AUG. 12, 1890.

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**FIRST SESSION.**

TUESDAY, August 12, 1890.

At half past ten the meeting was called to order by E. B. Heimstreet, secretary, stating that it was time to call and none of the officers were present. R. Saurhering moved that John A. Dadd take the chair. Motion carried. Mr. Dadd stating that he was pleased to act, and that it was first, eleven years ago, that he was in the same place.

On motion, reading of minutes and roll call of members was dispensed with, they being print, and the secretary reported a quorum present.

The Executive Committee reported favorable on the following names:

George H. Hensel, Milwaukee; B. C. Williams, Waukesha; L. C. Meyer, Sheboygan; B. J. Jurgensohn, Manawa; W. L. Sanner, Waukesha; I. H. Tarrant, Janesville; B. E. Knorr, Eau Claire; Emil Maurer, Arcadia, who were elected.

Secretary's report was then called for and read as follows:

**REPORT OF PERMANENT SECRETARY.**

GENTLEMEN:—The expense of last meeting at Portage as per bills received from the local secretary was \$68.02.

In October, 1889, the proceedings of the meeting at Portage was sent to all the members and to Pharmaceutical Associations, the report being a book of sixty-four pages, exclusive of the Board of Pharmacy report, and costing \$39.37; this including cost of electrotypes plates, etc. Five hundred copies were printed. June, 1890, a circular was sent to all the druggists of Wisconsin inviting them to this meeting.

In July, by instruction from the executive committee, a badge was procured of white metal, with number and name of association. The badges were made by the Schwaab Stamp and Seal Co., of Milwaukee, and cost, for five hundred, \$36. When received they were placed in the hands of the Treasurer for sale to members. The die is held by the Schwaab Co., and more can be procured at any time.

Twenty-six new members were elected at the Portage meeting. Three hundred and eighty-six active members are on the list, but some are in arrears for dues.

There has been but one death reported since last meeting, that of Mr. H. R. Doane, of Delavan, a full account of which will be found in the report of the executive committee.

Proceedings have been received from many of the Pharmaceutical Associations of other States and are on file in the Secretary's office. Copies of *Pharmaceutical Era*, *National Druggist*, *Registered Pharmacist*, *Meyer Bros.' Druggist* and others have been received during the year and are on file at the Secretary's office.

The receipts for the year are \$389.25.

Cash on hand August, 1889, \$12.39. Expenses of the year \$384.84, leaving a cash balance this date of \$67.30.

A large number of letters have been received during the year and answered. A few of them have been filed for action at this meeting.

Your Secretary reports progress on the insurance question, and the committee will meet this evening to make final arrangements; and the prospect is now that the next Secretary's report, one year from now, will include a report of a dividend to those interested.

From items gathered from other reports our Association, while not so large in members as many, will hold its own in quality of papers and interest taken in the meetings, while for amusement outside of meeting hours it is excelled by none.

E. B. HEIMSTREET, Secretary.

This was followed by the report of the Treasurer, viz.:

#### TREASURER'S REPORT.

*To the Officers and Members of the Wisconsin Pharmaceutical Association:*

GENTLEMEN:—I have the honor to submit herewith my annual report as Treasurer for the year ended July 31, 1890:

The Wisconsin Pharmaceutical Association in account with W. P. Clarke, Treasurer.

1889.

DEBIT.

August 1—To cash on hand.....	\$12 39
"—To cash for 26 memberships.....	52 00

August 1—To cash for 18 certificates.....	6 50
“ —To cash for dues.....	308 00
“ —To cash for badges.....	22 75
Total .....	\$401 64
CREDIT.	
“ 20—By paid order No. 125 .....	93 24
“ —By paid order No. 126.....	68 02
“ —By paid order exchange, two.....	30
Nov. 1—By paid order No. 127 and exchange.....	17 85
“ 19—By paid order No. 128 and exchange... ..	71 72
1890.	
Jan. 6—By paid order No. 129 and exchange.....	18 20
July 2—By paid order No. 130 .....	34 87
“ 24—By paid order No. 131 .....	24 62
“ 31—By paid postage on badges .....	1 50
Total .....	\$330 82
Balance on hand, stamps.....	4 02
Cash.....	67 30
Total .....	\$401 64

W. P. CLARKE,

Treasurer.

Milton, Wis., Aug. 1, 1890.

Attached to the Treasurer's report was a list of names of members in arrears for dues. The reports of the Secretary and Treasurer were referred to the Executive Committee for examination.

Report of Executive Committee called for; not being ready they were granted further time to report.

W. G. Spence, R. Sauerhering, J. M. Evans were appointed as Committee on Exhibits, to report Thursday morning.

The balance of the morning was occupied by payment of dues, etc.

## SECOND SESSION

Was called to order at two o'clock by President Edwards, who said:

LADIES AND GENTLEMEN:—I am pleased to see such a good attendance at this meeting, and I trust that our sessions will be pleasant and instructive to us all. The first thing on the programme is election of new members.

Secretary presented the names of Frank Watson and D. A. Taylor, of Chippewa Falls, and Dr. A. F. Blackburn, of Waldo, who were balloted for and elected.

President Edwards then introduced Dr. A. H. Levings, mayor of Appleton, who addressed the convention.

#### MAYOR LEVING'S ADDRESS OF WELCOME.

MR. PRESIDENT AND GENTLEMEN:—This might well be called the age of conventions, of associations and of organizations. There is to-day almost no profession, no trade, no class of mechanics or laborers who are not united in state, or city or town organization, each endeavoring in its own way and in its own sphere to better its condition.

The ministers meet in conference and synod and discuss their creed and their confession of faith. They are striving for a surer and perhaps better way of saving mankind. The doctors in convention assembled gather inspiration from each other, hoping to find some safer and shorter road to health than the one they have been accustomed to lead their patients. The engineers, the brakemen, the carpenters, the weavers, the masons, meet in unions and labor organizations, they discuss their wrongs real or imaginary they demand higher wages and fewer hours, a more equitable division of the results of their toil. Their leaders and agitators may and perhaps often do excite them to commit excesses. Strikes are inaugurated, cities and communities are for a time greatly inconvenienced, but the result with a few exceptions, is an improvement of their condition. They come to a better appreciation of their worth, and labor is made more honorable. Conventions and labor organizations, agitations and strikes are but the restless expression of a discontent, a striving after something better, a desire for advancement, a seeking after a better life. It is a fortunate thing and one of the promising signs of the times, that so many men in every calling and in every profession, are alive to their interests, that they are not content with the past but are reaching out for greater success in the future, that they are not only willing but anxious to break for a few days from the cares and toils of every day life, for the purpose of an interchange of ideas on subjects that most interest them. In discovering their errors they gather new truths. In the atmosphere of a convention the indolent become industrious, the timid courageous and the contented ambitious. So that each and all return to their accustomed locations determined to do better work in the future than they have done in the past. He that always remains at home and communes only with himself, his patients or his patrons, is sure to be left behind in the race for position and for wealth. He who is content with his position and his surroundings makes no advances. It is the restless discontent, the unceasing toil for the improvement of one's

condition, which brings new truths, new discoveries and one's own advancement.

The druggists of Wisconsin in common with those of many other states, have taken a most commendable start for a higher education of its members. Insisting on certain requirements notable among them, some years of training, during which time the candidate must acquire a knowledge of chemistry, pharmacy, materia medica and something of botany. Nothing could you have done more to your credit, and better calculated to be a benefit to the general public. Much has been said of late regarding paternalism, about the state exercising jurisdiction over its own. It is claimed that these acts are an infringement upon personal liberty. That the state should not interfere but allow every man to work out his destiny as he may see fit. In times both ancient and modern wherever the descendants of man here become associated, rules and regulations, laws and precepts, have been found necessary. There has always been the ruler and the ruled, and as society has advanced, as man became more intelligent, more enlightened, these laws and regulations, these restrictions have become more numerous and exacting; one is obliged to forego something for the general good. Man's personal liberty must stop short of bringing harm or injury to his fellow beings. Should he desire untrammelled restraint, he must take himself to the mountain's fastness or the uninhabited plain, but he may even then find some native of the glen or beast of the plain that will call in question his rights. It is time this government put off its swaddling clothes and had a care of its subjects. For what profession or trade is there in which knowledge or skill is necessary for success that can expect to make advancement, if there are no requirements, no special knowledge or proficiency exacted of those entering the profession or trade. These restrictions may perhaps work an injury to some limited few, but they are for the benefit of the many. There are some who will succeed in every calling who have had few or no advantages, but they are the exceptionably bright minds that will brook no failure, but how much greater would have been their success had they been well equipped for the race.

The people of Appleton and of the Fox river valley are, Mr. President, glad to welcome you to their midst. They are proud of the advancement your society has insisted on and made. And you may rest assured that your efforts will meet with the approval of intelligent people.

In presenting you with this address and in extending to you this welcome and the freedom of this city, I feel that my duty is a pleasure and my task an honor.

The address was received with hearty applause, after which R. D. Pulford, of Mineral Point, was called on to respond.

MR. PRESIDENT, LADIES AND GENTLEMEN:—I greatly regret that the gentleman who was to have made this response is absent as I hardly feel myself worthy to fill his place. It affords me, however, great pleasure to state in a few words that I appreciate, on the part of the Association and every member of our Association, your kind welcome to this beautiful city, and also for the hearty words of encouragement and greeting to our Association. We are proud of the progress it has made. It is a record of which we may feel necessarily proud. We are not willing or disposed to yield to any, and we are looking forward to still further advancement. Our motto will be "Upward and Onward." It affords me, sir, great pleasure to respond to your able address to our Association. We thank you for your words of welcome and, I have no doubt, will tax your hospitality to its fullest extent.

President Edwards then delivered his annual address:

#### PRESIDENT'S ADDRESS.

GENTLEMEN OF THE W. P. A.—Another year with its pleasures and pain, its victories and defeats, has quickly passed, and we are again permitted the pleasure of reassembling together to deliberate upon and discuss such questions as may seem of greatest moment to us for the promotion of our life's work—to lay aside for the time our personal cares and make common cause and work for the welfare and advancement of an honorable and loved profession. Having watched the progress of this association from its initial meeting, it is with feelings of pleasure and pride that I find so many present to-day, among your numbers many new faces, indicating an increasing interest in our society, and the familiar ones showing unabated zeal for our welfare. For the work in hand you have, I trust, come well prepared. It would be presumptuous for me to attempt to outline what the year past, since last we met, has done for the advancement of pharmacy—an advance which is steady and great, and which requires constant attention to keep abreast of the times. With a wealth of Pharm. Literature at his hand, the progressive Pharmacist needs no one to recall the past. We are here to plan for the future and for that you have your lines drawn, and are ready for whatever comes. There are, perhaps, a few points you will allow me to suggest, to be considered in the course of the meeting. I understand that the Medical Profession of Wisconsin desire and intend to make further effort toward securing proper legislation for the regulation

of the practice of medicine in this state, and will introduce a bill for that purpose at the next meeting of the legislature. It seems to me that the movement ought to have the sanction and support of every druggist, and I earnestly recommend it to your consideration. When we were fighting for our Phar. Law, we received help from the medical men and we should not forget it. The practice of medicine and pharmacy, are alike of deep interest to us. It is our privilege to consider and decide how best to prepare the medicinal agent to insure the most perfect results, and further the common purpose of the twin professions, relief for the suffering and distressed. It is a work which demand of us thorough knowledge and scrupulous honesty. Upon our efforts depends much of the success of the physician. If then, this legislation is necessary, is it not our duty to put our shoulder to the wheel and help it through.

Another point to which I desire you to give your attention is the practice of selling at cut prices, often less than wholesale rates, by certain mercantile firms, of articles kept by druggists. It is a growing evil and a most serious one to those having to contend with it. The consideration of how best to meet this condition of things and what position should be taken towards manufacturers who sell to cutters is recommended to you as worthy your earnest attention. I wish to call attention to the practice of appending druggists' names to advertisements of patent medicines. I think it is one that many druggists fall into without giving it other thought than sales to follow. Remember that as druggists you are to a great degree educators of public opinion. The pharmacist is generally looked upon in his community as a person of more than average information, and rightly, too, as a rule. His opinion carries considerable weight and this should be kept in mind, and nothing said or done to mislead the public. By indorsing quack medicines with your name, most people are influenced by it to try them. The patent medicine is with us, and will stay until the public are sufficiently educated in such matters to see their mistake in using them. There is nothing that people otherwise well educated, have so little knowledge of as medicine and the practice of medicines. It all seems a mystery to them, and the more mysterious it appears the better it seems to suit the majority. Witness the many fashionable "cures," and can you wonder that the quack and patent medicines flourish?

During the past year a Georgia court decided that as patent medicines are secret, or intended to be secret, so that their manufacturer may derive profit from such secrecy, they are liable for all injuries sustained by anyone who take the medicine in such quantity as may be prescribed by them. This is a good point, and

if generally sustained would do away with the more dangerous ones. The following I clipped from a recent medical journal:

**POISONING BY "PISO'S" CONSUMPTION CURE.**—Two cases of such poisoning are reported in the Omaha Clinic, one in a child, the other in an adult. Both showed that the poisonous element was opium. Neither proved fatal.

A few years ago a case came under my own observation that ended more seriously. A woman prescribed and prepared for a neighbor's child a dose of "worm tea," the administration of which was followed by epilept form convulsions and death.

With such instances before you are you willing to assume the responsibility by allowing your name to appear in connection with a class of so-called remedies, the composite of which you know nothing?

Closely allied to the patent medicines is the proprietary specialties that are now crowding our shelves. Articles that the pharmacist who purchases them must accept, not on his knowledge of the composite but on faith. I am not one of those who believe that honesty pertains to any particular class. Humanity averages about the same in whatever trade or profession it is studied. There are as many honorable gentlemen in the manufacturing class as any other and no more. So that I have no desire to reflect upon the honesty of any one. Prepare everything you can, buy what you cannot profitably make, and nothing more, I think you will find the latter a small list. Cultivate closer relations with your physician. Let him understand fully, that you are competent and willing to prepare for him anything he may desire. If he has a pet formula, prepare it for him. If you are worthy of it you will soon establish a confidence that will be mutually advantageous. You will no longer be at the mercy of every manufacturer's agent that comes along with elegant, this or that. It is time to wake up and get back the trade that we have good naturally allowed to slip away, and not be simply "dope peddlers."

In arranging for our meeting next year, I would suggest that we have but one business session each day, this to commence promptly at nine o'clock in the morning, and continue until one o'clock p. m. The remainder of the day can then be given up to recreation, sociability and the exhibit. During the business session the exhibit room should remain closed and sports prohibited. This will give us the same number of hours for work that we now have and nothing to interfere and call away the members, and will insure a fuller attendance and better results. Under the present arrangement there seems to be too much conflict between work and play.



From the number of Wisconsin young men reported in attendance at other Colleges of Pharmacy, I think it well to call your attention to our State School of Pharmacy, an institution of which we may all justly feel proud. It is an outgrowth of this Association and should receive the support and encouragement of every member. It is a prosperous and flourishing institution, second to none for thoroughness, and ample facilities to secure to its students the best Pharmacial education. I hope you will each use your best endeavors to induce your apprentices to attend the Wisconsin School of Pharmacy.

Before concluding, let me ask each and all of you to make it a special point to entertain, as far as possible, every new comer in attendance upon our meeting. Let us feel it a common duty to take each stranger in hand and make him feel that he is one of us and that his presence is not only desired, but necessary for the furtherance of our work. Let no one go away from the meeting without feeling that Wisconsin Pharmaceutical Association has a hearty welcome for every one who honors us with their presence. Finally, let me thank you for the many courtesies I have received at your hands and for the honor you have accorded me, with the assurance that in the future I shall use every endeavor to further the interests of the Wisconsin Pharmaceutical Association.

R. D. Pulford moved that a committee of three be appointed on President's address, and Messrs. J. A. Dadd, A. Conrath and R. Sauerhering were so appointed.

Here an invitation was read from the Appleton Club, which very cordially invited the visitors to call at their club rooms while in the city, being signed by the President and Secretary of the club.

J. A. Dadd moved a vote of thanks be tendered Appleton Club for tender of use of club rooms to the Association while here—carried.

Prof. F. B. Power, of the State University, said, "It is desired to call your attention to the following circular in relation to Pharmacists, which deserves the attention and interest of Pharmacists throughout the state, and action should be taken on the same at the present meeting of our Pharmaceutical Association at Appleton:"

The subject thus referred to relates primarily to the adulteration of drugs and medicines, and also articles of food and drink, and to the consideration of such measures as it seems expedient at the present time to suggest for the better enforcement of existing laws, and for the realization of the protection and benefits which they are designed to afford.

The importance of this subject has long been recognized by the Pharmacists of Wisconsin, and from the very inception of the State Pharmaceutical Association the latter body has sought, through the appointment of special committees on the Drug Market and on Adulterations and Sophistications, to exercise the necessary control of the quality and purity of all substances designed for medicinal use. The annual reports of such committees have given evidence of an earnest effort in this direction, but from the nature of the circumstances under which these duties could be performed it has never been possible to accomplish in a satisfactory or adequate manner the purpose in view. These conditions are well represented by the remarks of Mr. F. F. Prentice in the conclusion of his report as Chairman of the Committee on Adulterations of the State Pharmaceutical Association in 1881, which are as follows:

"Personal observation is necessarily limited to the opportunities and time of the observer, and no five men who are obliged to confine themselves to such *stems* as happen to come in their way and arouse suspicion, can make such a report. They need the co-operation of all druggists in the State, and if each one, when meeting with anything of interest, will communicate it to the committee, a very creditable and instructive report will be the result. Finally, we would call attention to the fact, that successful efforts have been made in some cities and states to have proper laws enacted to prevent the adulteration of food and drugs. It is merely a question of time when that subject certainly must and will receive the attention it deserves in this State, and we sincerely hope that this Association will be the first to take the initiatory step to recommend and secure such legislation."

It is therefore the desire of the undersigned to call the attention of the members of the State Association at this time to the fact, that by the official appointment in 1889 of a Dairy and Food Commissioner for Wisconsin, and the simultaneous enactment of a law setting forth the duties of this officer, more favorable opportunities are now presented than ever before for securing to the Pharmacists of the State those benefits which the provisions of this act are evidently designed to bestow.

To indicate briefly the scope of the present law, section 8 of chapter 452, laws of 1889, may be here quoted:

"It shall be the duty of the Commissioner to enforce all laws that now exist, or that may hereafter be enacted in this State, regarding the production, manufacture, or sale of dairy products, or the adulteration of any article of food or drink or of any *drug*; and personally or by his assistants to inspect any article of milk, butter, cheese, lard, syrup, coffee or tea, or other article of food or

drink or drug, made or offered for sale in this State, which he may suspect or have reason to believe to be impure, unhealthful, adulterated, or counterfeit, and to prosecute, or cause to be prosecuted, any person or persons, firm or firms, corporation or corporations, engaged in the manufacture or sale of any adulterated or counterfeit article or articles of food or drink or *drug*, contrary to the laws of this State."

Section 2 also makes the following important provisions:

"Such Commissioner may, with the consent and advice of the Governor, appoint two assistants, each of acknowledged standing, ability and integrity, one of whom shall be an expert in the matter of dairy products and the other of whom shall be a practical analytical chemist," etc.

The duties of the present able and energetic Commissioner, Mr. H. C. Thom, and his expert assistant, Mr. F. G. Short, have thus far been chiefly confined to the inspection of dairy products and a few of the more important articles of food; and these necessary limitations of their work have rendered it quite impossible to undertake any systematic examination of drugs or other related articles included in the provisions of the act. It would therefore seem eminently appropriate and desirable, that the Pharmacists of the State should seek to secure the extension of this work in the directions indicated, and thereby to co-operate in increasing the usefulness and efficiency of this most important branch of public service.

In connection with these preliminary explanations, due consideration should be given to the fact, that for the examination of drugs, as well as of many articles used as food or drink, special qualifications are necessary which can only be acquired by a broad and thorough training in several branches of applied science, but which fall within the legitimate scope and particular province of Pharmacy.

It is believed that under proper conditions the Department of Pharmacy of the University of Wisconsin might be able to extend its present scope, and advantageously utilize the excellent facilities it now possesses, by assuming such of the functions of the Dairy and Food Commission as relate more especially to the examination of drugs. Such work, when systematically and thoroughly performed, would not only be of direct material value to the professions of Pharmacy and Medicine and the State at large, but by the circulation of printed reports of the bureau an important educational influence would at the same time be exerted.

For the realization of the purpose in view it is a primary requisite that there should be appointed a suitable expert,

thoroughly qualified in all matters pertaining to the chemical analysis of organic and inorganic drugs, as well as the use of the microscope, and who would at the same time be capable of rendering the much needed aid in connection with the instruction of the Pharmaceutical Laboratory.

The perfection or amplification of this plan will apparently require some legislative action, and possibly a slight additional appropriation, in order that the branch of public service for which it provides shall receive official recognition, be vested with the proper authority, and become established on a permanent basis.

The undersigned therefore earnestly recommends that the Wisconsin Pharmaceutical Association, through its Committee on Legislation or by other suitable means, should take such action as may seem best fitted for the accomplishment of the purpose here set forth.

It may finally be stated that the proposed plan has received the hearty approval of the Dairy and Food Commissioner, Mr. H. C. Thom, and those directly associated with him and interested in his work. With the expression of approval and the united efforts of the Pharmacists of the State, it is hoped that its successful inauguration will be assured, and Wisconsin will thus have taken the initiative in a branch of pharmaceutical service which it is believed will prove worthy in its aims and beneficent in its result.

Very respectfully,

FREDERICK B. POWER.

Professor of Pharmacy and Materia Medica in the University of Wisconsin, and Chairman of the Committee on Adulteration of the Wisconsin Pharmaceutical Association.

And I move that the matter be left to the Committee on Legislation—motion adopted.

Secretary then read the following papers from the Union Association, which were referred to Committee on Legislation:

The Ramsey County Pharmaceutical Association (St. Paul, Minn.) and the Minneapolis Pharmaceutical Association have joined forces in an earnest endeavor to help themselves and their brothers throughout the land. At a joint meeting held June 11th, the following address was adopted:

To the Manufacturers, Proprietors, Importers and Wholesale Agents of all Proprietary Medicines usually sold by Retail Drug-gists in the United States:

GENTLEMEN:—There are in many cities and large towns in this country, certain establishments known as Bazaars, Fairs, Department Stores, etc., which establishments deal in dry goods, toys, baby carriages and general merchandise, and whose chief aim

seems to be to build up themselves by tearing down everybody else. The chief effect of the methods adopted by these establishments is to demoralize trade generally, and more particularly the proprietary medicine business. They buy proprietary medicines, perfumes and proprietary articles, in large quantities, at the very lowest rates, and sell them at retail, at cost or less, solely as a means of advertising and drawing customers for their other business.

Now, gentlemen, we submit to your careful consideration, as business men, the question, whether in your judgment, this state of affairs can result, ultimately, in anything else than the utter demoralization of the entire proprietary medicine business. We think it will so result. You must certainly see that it is a great injustice to us and that it is to the interest of the druggists to work against the sale of all these proprietary articles whose manufacturers refuse to protect us in a living profit.

You cannot be unmindful of the fact that you made use of us as the medium through which you were enabled originally to introduce your goods, and that you still rely upon us as the chief and in most localities, the only medium, through which you can reach the public. Indeed, it would be almost impossible for you to reach the customer with your goods without our assistance. We think it exceedingly unfair that the druggists should now be compelled to sell your goods without a cent of profit, or let them rot on their shelves, simply to gratify a few outsiders who make use of these goods for advertising purposes. No more of your goods will be sold on account of the cut rates. On the contrary, you will sell less of them than you would if the sale was confined to regular pharmacists, and the full price maintained. The very fact of their being used by these outside parties as an advertising dodge, tends to drag them in the dirt and lower their reputation in the estimation of the public. Those who cut prices, so far as the druggists are concerned, are the very men who substitute most and run in other articles than those that are advertised.

It may be interesting now, to some of you, to sell large quantities of your goods to these sharks who sell them at retail for less than we can buy them, in such quantities as we are likely to need of them,—but by-and-by it may not be so funny. We predict that the time is near at hand when you can no longer use us as the distributors of your goods unless you protect us. The pharmacists and druggists are the only natural and legitimate distributors of proprietary medicines, and if they cannot sell them at a living profit, they will be forced to discard them entirely and substitute like preparations of their own manufacture.

We believe that by the united and active co-operation of the pharmacists, we can make it exceedingly difficult, if not impossible, for any one to float any proprietary medicine, no matter to what extent it may be advertised. There may be some lack of co-operation now, in some localities, but a common grievance will unite us in a common effort of redress.

Each Pharmaceutical Association, or the combined Pharmaceutical Associations, may be compelled to have analyzed the principal proprietary medicines, whose proprietors fail to protect us, and publish to the world the formula of such articles; and get up similar preparations of their own, and unitedly advertise them as extensively in every locality where such preparations are advertised. We think we can find a way to buck every proprietary medicine whose proprietors refuse us protection.

We believe, gentlemen, that the remedy for this grievance lies entirely with you, and unless you take measures to protect us, we will take measures to protect ourselves against the inroads of these enemies of our business. We are willing to co-operate with you, but we are not willing to buy and sell your wares at cost, or to buy and sell the wares of any of you who suffer your goods to get into the hands of these pirates.

You cannot reasonably expect to distribute your wares through us, unless you protect us in our legitimate profit. These articles are now sold by us at as low rates as we can afford to sell them, and many of them do not afford us profit enough.

We do not propose longer to be the blind dupes to aid you in storing up magazines of ammunition to be fired at us by the enemy. You can stop this business if you will, and you must do it or we will cease to sell your goods. It will not do for you to say to us, send us the names of these cutters and show us where they get their goods and we will stop it, and then go yachting, leaving us to take care of ourselves the best we can. We will send you the names of the cutters, as far as we know them, but it is your business to ascertain where they get their supplies, and stop it. It is sufficient for us to know that your goods are in the hands of cutters. It is our determination to wage unceasing war against every proprietary medicine found in the hands of cutters, regardless of how it got there. You hold the key to the situation, and you must lock them out.

We hereby earnestly request all manufacturers, proprietors, importers and wholesale agents, of proprietary medicines in the United States, to take measures at once to prevent their goods from getting into the hands of cutters of every name and description.

We respectfully suggest that this can be done by your refusing to sell to any one but regular pharmacists and regular wholesale druggists of good standing and honor. We recognize the wholesale druggists as the natural distributors of these articles to the retail druggists, and we believe that they are willing to co-operate with you and us in stopping this piratical business, and we request that you allow them a fair and reasonable profit.

We request that you sell only to regular pharmacists and regular wholesale druggists, and in such quantities only as they can dispose of in a regular and legitimate way; and that you take written pledges from every person to whom you sell your goods, whether wholesale or retail, binding them under forfeiture to not re-sell them to any person, either directly or indirectly, who cuts the prices—or to any person or persons, other than regular pharmacists and druggists; Provided, however, that we have no objections to your selling to general dealers in reasonable quantities, under proper restrictions, in small places where there is no regular druggist. This is a friendly communication. A word to the wise is sufficient. We hope you will not compel us to resort to more extreme measures.

With the above address is enclosed the following letter:

M. . . . .

#### Wholesale Druggists.

GENTLEMEN: Herewith enclosed please find copy of a joint address of the Ramsey County and the Minneapolis Pharmaceutical Associations, to the manufacturers, proprietors and wholesale agents of proprietary medicines in the United States:

We have sent a copy of the address to the principal manufacturers, and to every pharmaceutical association in the United States, and requested them to take similar action.

We know that you are our friends, and we earnestly request you to aid us in this matter by refusing to sell to cutters, and by reporting to the manufacturers all cases of cutting that you hear of, and request them to keep their goods out of the hands of cutters and outside parties.

We also respectfully request that you see that this subject is brought up at the next meeting of the National Wholesale Druggists' Association, and that some vigorous action be taken by that body to put a stop to this unfair business. We think that you individually, and through your Association, can bring great influence and power to bear upon this evil, and by our united efforts we can eradicate it. You must certainly see that if some check is not brought to bear upon this evil it will not be long before proprietary medicines will be supplied freely through whole-

sale houses in other lines, and sold by every corner grocery and dry goods store in the land; you will lose much trade that legitimately and properly belongs to you; and your customers will be cut off, and many of them ruined in business. You will readily understand that we will feel most friendly to those wholesale houses who lend us their assistance in this matter.

We invite your active and most vigorous co-operation, and will be pleased to hear from you on this subject.

The letter sent to the pharmaceutical associations reads as below:

*President Pharmaceutical Association:*

DEAR SIR:—Herewith enclosed please find a joint address of the Minneapolis and the Ramsey County Pharmaceutical Associations to the Manufacturers, Importers and Wholesale Agents of proprietary medicines in the United States, a copy of a letter addressed by us to the wholesale druggists of the United States; and also a copy of a notice which we send to all manufacturers whose goods we find in the hands of cutters here.

We earnestly request that you present this matter to your association at its next meeting and urge them to take similar action at once.

We have made this request of every pharmaceutical association in the United States, and we think if all of them take prompt action, and do their duty, much good will result from our combined effort. We believe that we can bring such pressure to bear upon the manufacturers that they will feel the necessity of keeping their goods out of the hands of cutters and outside parties. Perhaps you can improve on our plan; if so, we will be glad to receive suggestions. But if we say it is a hopeless undertaking and do nothing we will accomplish nothing. Let us arise in our strength and drive this enemy from the field—and we can do it. Strew the field with the debris and carnage of battle and keep it up until the last foe is vanquished.

We are forging heavier ordnance, and you may hear from us again upon this subject after the meeting of our state association. In the meantime please take prompt and vigorous action.

Our plan is to let the manufacturers hear from every pharmaceutical association in the United States, in language that cannot be mistaken. All local associations should take immediate action, and the state associations follow suit at their next annual meetings. This may reach some local associations where there is no cutting of prices going on at present. To all such we suggest that it is only a question of time when the cutting will reach you, unless something is done, as this thing is spreading. Join with us



now and the cutting never will reach you. If any association neglects to take action in this matter, there will be so much less pressure brought to bear upon the manufacturers and consequently so much less likelihood of success. Manufacturers can stop this cutting of prices if they are compelled to do it; there is no manner of doubt about this; and we can compel them to do so. We beg of you to take prompt action and do your duty. Let the fire be general all along the line. Pour in Greek fire and grape and canister.

The cost of the necessary stationery and postage is a small matter for each association. We will be pleased to furnish you, upon application, the addresses of all manufacturers and wholesale druggists in the United States. Please advise us of any action your association may take in this matter.

*Special Request.*—The secretaries of the associations who receive this letter will confer a great favor upon us by sending us, at their earliest convenience, the addresses of all the local Pharmaceutical Associations or organizations in their respective states.

This may reach some associations that have already held their annual meeting. If so, please let some communication be sent at once to the Manufacturers and Wholesale Druggists, by your President and Secretary, or by your Executive Committee.

These circulars are certainly sufficiently plain and explicit not to be misunderstood, and success is sure to perch upon the banner of the retailer if this scheme meets with general approval and support. Now is the time for state and local organizations to justify their existence by an endeavor to protect the interests of their members. And these members, too, must realize that individual effort is necessary and get up and do something. The Ramsey County Association doesn't wait for some outsiders to come to its assistance, but speaks plainly to the manufacturer in a letter as below:

GENTLEMEN:—We desire to inform you that your goods as in the hands of a .....store here, known as ..... owned by .....and we understand that they purchased these goods of .....

The proprietors of... .. are not druggists, and are selling your goods at cut rates, viz: ... ..

We believe they are doing this solely as an advertising dodge, and that they have no interest in your goods, or reputation as druggists, at stake.

We are united here, as you will see by the joint address of the Minneapolis and Ramsey County Pharmaceutical Association to the manufacturers of proprietary medicines, a copy of which address we herewith enclose.

You will see by this that we have declared "war to the knife" against every proprietary medicine found in the hands of this class of cutters, regardless of how it got there. If you desire us to sell your goods we respectfully request that you get them out of the hands of cutters. It is simply a question of which you prefer—our trade or theirs. You cannot have both, for we are determined to fight to the bitter end every patent medicine found for sale by cutters. This is a friendly note, and we trust that you have the business sagacity not to allow the reputation of your goods to be smirched in that way. If we can be of any assistance to you, please let us know, but it will be best for you to get your goods out of the hands of these cutters, or we will work against their sale to the utmost of our ability.

Referred to Executive Committee.

President called on Adam Conrath for paper.

Mr. Conrath, responded as follows:

"There is so much to be said about the Seidlitz Powders, and I had intended to obtain samples of same more than I did, but was not able to do so. I prepared this paper, and will read it." (Reads paper, which is handed to Committee on Papers.)

Secretary—"I would like to ask Mr. Conrath if these Seidlitz Powders were made by manufacturers or by retail Pharmacists?"

Conrath—"I understand that one was made by a manufacturer, an Eastern manufacturer, I think."

The report on Pharmacopea was called for, but was not prepared.

President—"Are there any questions to be asked, if not, this completes the regular order of business this afternoon?"

Mr. John A. Dadd announced that he desired to say a little upon a subject, which was of great interest to all druggists, (at least by the interest those with whom he had conversed upon the subject) and he thought it was a matter that should be given attention.

(See paper on closing drug store.)

F. Robinson said this is a very important matter, and is a matter that I have had some little conversation, and I am glad that this address has been made and think it is a step in the right direction. I would move that this address of friend Dadd's be referred to a special committee of three, whose business it will be to draw up a resolution for action by this Association. Motion carried; and Messrs. Robinson, Conrath and Huber appointed as such committee.

Secretary read letters from National Wholesale Druggists Association, appointing Messrs Thos. A. Green, Harvey W. Drake and B. B. Hopkins, all of Milwaukee, as delegates to this Association. None of the gentlemen being present the paper was accepted and placed on file.

A proposed code of ethics was read by the secretary, and on motion the same was referred to a committee consisting of J. A. Dadd, R. Sauerhering and J. H. Kamps, to report at next session.

"What is the best Excipient for Pills," was the title of a paper presented by F. M. Coon, of Evansville, and read by Adam Conrath, Mr. Coon being absent.

(See papers.)

The Secretary was directed to send a telegram to the Illinois Pharmaceutical Association, now in session at Kankakee, Ill., extending congratulations and good wishes.

Nothing further being presented the Association adjourned.

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### THIRD SESSION.

WEDNESDAY, 10 a. m., August 12, 1890.

Called to order, with a large attendance.

B. B. Collyer, Clinton Junction and C. A. Spencer Waupaca, were elected to membership.

Prof. F. B. Power, then presented the

#### REPORT OF THE COMMITTEE ON ADULTERATIONS.

*To the Wisconsin Pharmaceutical Association:*

Although the Committee on Adulterations, appointed at the last meeting of the Association was an exceptionally large one, no reports have been received from the members, and the duties of the chairman, who was again appointed to this position contrary to his expectations and desires, have prevented his undertaking an extended correspondence for the purpose of soliciting contributions to this report.

One important medicinal agent has, however, been brought to the writer's notice through the watchfulness of our worthy President, Mr. Edwards, of Portage, which seems to present an example of such gross fraud and misrepresentation that it should receive the serious consideration of the members of this Association.

The article in question consists of quinine capsules, manufactured by the Mertz Capsule Company, of Detroit, Mich. These capsules according to the label on the package, are represented to contain 3 grains of sulphate of quinine and  $\frac{1}{2}$  grain of capsicum.

Mr. Edwards having already found these capsules very deficient in weight, an original and unbroken package was sent to me for examination.

The package, which is a shallow tin box, contained exactly 100 capsules, and upon weighing the entire number, the average weight of each capsule, including the gelatin, was but 2.48 grains. Five of the capsules were then opened and the contents weighed, which amounted to 0.79 grain. If we were to subtract from this the amount of capsicum, which the capsules are represented to contain, or  $\frac{1}{2}$  grain, the amount of sulphate of quinine would be reduced to 0.46 grain instead of 3 grains. It has been shown, however, by Dr. V. C. Vaughn, of the University of Michigan, in an article published in the Medical News of May 8, 1890, which has just come to my notice, that these capsules are not only short in weight, but that in two boxes examined by him "not the smallest trace of capsicum could be found."

Whether the notable deficiency in weight in this case be due to intentional fraud or to carelessness, the deception is equally great and criminal, and must justly call forth the severest censure.

No better example could indeed be afforded of the disadvantages liable to accrue to both physician and pharmacist, to say nothing of the patient, who is most vitally concerned of all, from the prevailing fashion of supplying of important medicaments in factory-made combinations and forms of doses. If the pharmacist is not himself capable of filling gelatin capsules with a mixture of quinine and capsicum, or if the physician will obstinately persist in the indiscriminate use of important remedials in the form here referred to, the situation is, indeed, a deplorable one. If such proportions must be employed, the importance of exercising a rigid control over their quality and purity is sufficiently apparent.

In concluding this brief report the writer would respectfully solicit the earnest consideration of the subject embodied in the circular letter recently addressed to the members of the Association, which represents the outlines of a plan for securing a more systematic and efficient control of the quality and purity of all articles designed for use as medicinal agent or for food.

F. B. POWER,  
Chairman of Committee.

Prof. Power—Since I arrived here at this meeting I find that Prof. V. C. Vaughan, of the University of Michigan, (Ann Arbor)

has been investigating the matter with the following results. He says:

"My attention having been called to the very evident short weight of some quinine capsules in the market, I determined to investigate the matter. I had believed that the present low price of quinine had removed all incentive to the placing of short-weight capsules on the market, but my investigations have convinced me that such capsules are even now offered for sale. Whether their existence is due to intentional fraud or to gross carelessness I cannot say, but I feel that the attention of the medical profession should be called to the existence of such capsules. These capsules were bought in the market in Detroit in original packages. Each package consists of a tin box, on the uppermost surface of which is a yellow label bearing the following: 'Keep in a cool, dry place. Superior gelatin elastic capsules. Prepared from extra French gelatin. The drugs are the best that can be procured. Manufactured by the Merz Capsule Company, Detroit, Mich.' On the end of the box is a small, white label bearing the following:

'106.—Quinine sulph ..... 3 grains.  
Capsicum ... ..... 1-3 grains.

I obtained four of these boxes, which I will designate by the numbers 1, 2, 3 and 4. In box No. 1 the capsules were not elastic, but were hard. This box contained originally 104 capsules. The short weight of these was easily determined. Twelve of the capsules, taken at random, weighed, gelatin and contents together, 1.858 grammes, or 28.67 grains, or a little less than 2.4 grains each. There could be no doubt about short weight in these. The actual amount of quinine in each of 12 capsules was determined as follows: The contents of each capsule was placed in a weighed one-ounce Erlenmeyer flask. The gelatin was washed free from quinine with absolute alcohol, the alcohol added to the quinine in the flask, the alcohol evaporated at a low temperature, and then the flask, with its contents, was dried at 105° C. to a constant weight. The weight of the anhydrous quinine sulphate multiplied by the factor 1.193 gives the weight of crystallized sulphate, allowing 8 molecules of water of crystallization, the highest amount of water allowed by the U. S. Pharmacopœia. The following table will show the result of these determinations:

No. of Capsule.	Weight of Flask.	Weight of flask with anhydrous quinine sulphate.	Weight of anhydrous quinine sulphate.	Weight of crystallized quinine sulphate.	Weight of crystallized quinine sulphate.
	Grammes.	Grammes.	Milligram.	Milligram.	Grains.
1	16.610	16.664	48	57.3	0.88
2	15.310	15.855	45	53.7	0.83
3	13.162	13.200	38	45.3	0.70
4	16.350	16.395	45	53.7	0.83
5	14.405	14.458	53	63.2	0.98
6	11.525	11.567	42	50.0	0.77
7	13.193	13.250	57	68.0	1.05
8	17.408	17.445	37	44.0	0.68
9	12.247	12.299	52	62.0	0.96
10	14.901	14.945	44	52.4	0.81
11	12.248	12.297	49	58.4	0.90
12	13.530	13.594	54	64.4	0.99

It will be seen from the above figures that the average amount of quinine is less than one-third of that which the capsules are advertised as containing. So much for the quinine; how about the capsicum? The contents of several capsules were dissolved in water with the aid of dilute sulphuric acid, and *not the smallest trace of capsicum could be found.*

In box No. 2 the amount of quinine was found to be larger than in the capsules from box No. 1, but again no capsicum could be detected. The method of determining the amount of quinine was the same as given above, and in order to save space I will only report results:

Capsule No. 1 contained	.....	2.28 grains.
" " 2 "	.....	2.23 "
" " 3 "	.....	2.28 "
" " 4 "	.....	1.85 "
" " 5 "	.....	2.48 "
" " 6 "	.....	1.46 "
" " 7 "	.....	2.03 "
" " 8 "	.....	1.60 "
" " 9 "	.....	2.47 "
" " 10 "	.....	1.54 "
" " 11 "	.....	1.50 "
" " 12 "	.....	1.22 "

The capsules in boxes Nos. 3 and 4 contained capsicum, and the amount of quinine sulphate was determined as follows: Each capsule was placed in a clean, one-ounce Erlenmeyer flask, 5 c. c. of distilled water, and 2 drops of dilute (1.5) sulphuric acid added. The flasks were then kept at 38° C. until the capsules had dissolved. The acid solution was then shaken with ether, and after separation the ether was removed and discarded. The contents of the flask were now rendered alkaline with a ten-per-cent. solution of sodium hydrate, and extracted twice with 25 c. c. of absolute ether. The ether was placed in weighed Erlenmeyer flasks and kept at 30° C. until the ether had evaporated, then heated at 105° C. to a constant weight. The weight of the anhydrous quinine multiplied by the factor 1.8784 gives the weight of crystalized sulphate of quinine with 8 molecules of water of crystallization ( $C_{20}H_{24}N_2O_2 \cdot 2H_2SO_4 \cdot 8H_2O$ ).

Twelve capsules taken at random from box No. 3 contained the following amounts of crystalized sulphate of quinine:

Capsule No. 1 contained	2.62 grains.
" " 2 "	2.54 "
" " 3 "	3.01 "
" " 4 "	2.96 "
" " 5 "	2.43 "
" " 6 "	2.22 "
" " 7 "	1.93 "
" " 8 "	2.78 "
" " 9 "	2.89 "
" " 10 "	1.99 "
" " 11 "	1.95 "
" " 12 "	2.30 "

Twelve capsules taken at random from box No. 4 contained the following amounts of crystalized sulphate of quinine:

Capsule No. 1 contained	2.62 grains.
" " 2 "	2.57 "
" " 3 "	2.53 "
" " 4 "	2.17 "
" " 5 "	2.86 "
" " 6 "	1.65 "
" " 7 "	2.16 "
" " 8 "	3.01 "
" " 9 "	2.86 "
" " 10 "	1.76 "
" " 11 "	1.74 "
" " 12 "	1.63 "

It will be seen that out of 48 capsules assayed, only 2 contained the amount of quinine claimed on the label.

Respectfully, V. C. VAUGHAN, M. D.  
University of Michigan, Ann Arbor.

Prof. Power stated that this was but one of the things that would arouse the Pharmacists to having a chemist appointed to work in the department under Mr. Thom.

Mr. Dadd said that it should be done and the Committee on Legislation should be backed by the Association, and a petition from the Druggists of the State should be sent in, as it would carry more weight.

E. B. Heimstreet moved that it be left to the Committee on Legislation, and they be empowered to send out blank petitions to every Druggist, to be sent in at next meeting of the Legislature.

R. Sauerhering moved the adoption of the report, and on motion same was adopted.

E. B. Heimstreet then read the ninth annual report of the Board of Pharmacy, which was adopted and placed on file.

See report Board of Pharmacy, following minutes.

#### REPORT OF INSURANCE COMMITTEE.

Your committee would report as follows:

Tuesday evening, August 12, 1890, a meeting was held. E. B. Heimstreet being called to the chair, and John A. Dadd elected as secretary pro tem.

The following Constitution and By-Laws were adopted, after which the members proceeded to election of Directors by ballot. The names were then drawn by lot, resulting as follows:

#### DIRECTORS.

For one year.....	{ J. C. Huber, E. B. Heimstreet, R. J. Washburne.
For two years.....	{ J. A. Dadd, W. G. Spence, J. M. Evans.
For three years.....	{ C. Widule, T. H. Spence, A. H. Hollister.

Officers were then elected for the year as follows:

President—C. Widule, of Milwaukee.

Vice-President—T. H. Spence, of La Crosse.

Secretary and Manager—E. B. Heimstreet, of Janesville.

Treasurer—R. J. Washburne, of Palmyra.



No business to be done until one hundred risks are taken of not less than one thousand dollars each.

The Company's books to be examined by a committee from the Wisconsin Pharmaceutical Association at its annual meeting each year.

The Committee would ask that the Association provide blanks, etc., for the use of the Committee until such time as the Company commence business, when amount is to be returned to the Treasurer of the Association.

#### ARTICLES OF ORGANIZATION OF THE DRUGGISTS' MUTUAL FIRE INSURANCE COMPANY.

SECTION 1. We, A. H. Hollister, E. B. Heimstreet, C. Widule, John A. Dadd, Fred Esau, W. M. Edwards, F. M. Givens, J. C. Huber, E. D. Pardee, T. H. Spence, C. R. Bechmannn, R. Saurhering, W. G. Spence, R. J. Washburn, J. M. Evans, F. W. Isham, H. D. Sykes, A. G. Ellis, residents of the State of Wisconsin, engaged in the business of selling drugs and druggists' materials, and owning in the aggregate, property within the State of Wisconsin of the value of one hundred thousand dollars or upwards, hereby associate ourselves together for the purpose of transacting the business of insurance, upon the plan of mutual insurance of drug stocks and other stocks, and the buildings in which the same are contained, from loss or damage from fire or lightning.

SEC. 2. The name of said company shall be The Druggists' Mutual Fire Insurance Company, of Wisconsin, and the principal office for the transaction of business shall be located at Janesville, Wisconsin.

SEC. 3. No stock shall be issued by said Company.

SEC. 4. The management of this company shall be in charge of a Board of nine Directors, who shall hold their offices for the term of three years. At the first annual meeting, the directors elected thereat shall be classified by lot, so that one-third of said directors elected shall go out of office at the end of one year, one-third at the end of two years, and one-third at the end of three years. Thereafter three directors shall be elected annually, to hold office for the term herein prescribed. All elections shall be by ballot. A majority of said Board of Directors present at any meeting thereof, shall constitute a quorum for the transaction of business. Said Board shall, from their own number, annually elect a President, Vice-President, Secretary and Treasurer of the Company, who shall hold their offices respectively until their successors are elected and qualified. Any vacancy in the Board of Directors shall be filled by the remaining members thereof until the next

annual meeting, when the members of the Company shall fill such vacancy for the unexpired term. Such Board of Directors shall make such By-Laws for the government of said Company and its officers as shall to them seem best, and may alter and amend the same at pleasure.

SEC. 5. The fiscal year of said Company shall commence on the second Tuesday of August, and close on the second Monday of August in each year.

SEC. 6. The annual meeting of said company shall be held on the second Tuesday of August.

SEC. 7. The corporation hereby to be organized shall exist fifty years, and shall have and enjoy all the rights, privileges and franchises incident to similar corporations organized under the laws of the State of Wisconsin, and such further authority as may be deemed necessary for the management of the affairs as far as the same is conferred by the law, with the right to alter and amend its By-Laws when necessary, to prescribe the duties of its officers, and fix their compensation. It shall have a seal which may be altered at pleasure.

SEC. 8. These articles of incorporation may be altered or amended at any annual meeting of this Company, in a manner not inconsistent with the law, by a vote of two-thirds of the members present.

SEC. 9. No compensation shall be allowed to any officers or agent of the Company, except for actual services rendered.

SEC. 10. The Secretary and Treasurer, and such other officers of the company as the Board of Directors shall direct, shall give bonds to said company for the faithful performance of the duties of their respective offices. The amount of such bond shall be fixed by the Board of Directors.

SEC. 11. All persons insured in this Company shall be members thereof during the period of their insurance, (during the period while their policies are in force,) and shall be entitled to one vote at the annual meeting of said company for each five hundred dollars of insurance. Such person may vote in said company, and may cast the same in person or by proxy. Any member of this company may withdraw therefrom by giving notice in writing to the Secretary, and paying up all dues and liabilities.

SEC. 12. All policies issued by this company shall be for the term of five years. No policy shall be issued until at least one hundred applications for insurance of at least one thousand dollars each are obtained. No risks shall be taken for an amount to exceed five thousand dollars; and in no case shall a policy of in-

surance be issued upon property for an amount exceeding two-thirds of the value of property insured, including the amount insured in other companies

SEC. 13. All applicants for insurance in this Company shall submit to the company a correct statement of all incumbrances and insurance on the property to be insured; and if at any time subsequently the property becomes incumbered, or any insurance is effected in other companies on said property, this Company must be immediately notified of the fact. In default of such notice, unless such transfer or alienation is assented to in writing by the Secretary of this Company, and the person to whom such property has been transferred shall also in writing subscribe to such agreement, and become subject to all the conditions of such policy, the policy of this company shall become void.

SEC. 14. It shall be the duty of this Company to classify the property insured therein at the time of issuing the policies thereon, under different rates, corresponding as nearly as may be to the greater or less risk from fire or loss, which may attach to the property insured.

SEC. 15. All persons insured in this Company shall give their obligations to this Company, binding themselves, their heirs and assigns, to pay their pro rata share to the Company, of the necessary expenses and losses by fire or lightning, which may be sustained by any member thereof, during the time for which their respective policies are written. And they shall also, at the time of effecting insurance, pay such cash precentage and other charges as may be required by the By-Laws of this Company.

A. H. Hollister.  
Christian Widule.  
Fred Esau.  
J. C. Huber.  
C. R. Bechmann.  
E. D. Pardee.  
W. G. Spence.  
J. M. Evans.  
H. D. Sykes.

E. B. Heimstreet.  
John A. Dadd.  
F. M. Givens.  
T. K. Spence.  
W. M. Edwards.  
R. Sauerhering.  
R. J. Washburne.  
Fred W. Isham.  
A. G. Ellis.

#### DRUGGISTS' MUTUAL FIRE INSURANCE COMPANY, OF WISCONSIN.

Notice is hereby given that we, A. H. Hollister, E. B. Heimstreet, Christian Widule, John A. Dadd, Fred Esau, F. M. Givens, J. C. Huber, T. H. Spence, C. R. Bechmann, W. M. Edwards, E. D. Pardee, R. Sauerhering, W. G. Spence, R. J. Washburne, J. M. Evans, Fred W. Isham, H. D. Sykes, A. G. Ellis, have associated

ourselves by articles of organization for the purpose of forming an Insurance Company, to be known and called Druggists' Mutual Fire Insurance Company, of Wisconsin, for the purpose of insuring upon the plan of mutual insurance, Drug Stores, Drug Stocks, Drug Fixtures, and such other property as is allowed by the laws of the State of Wisconsin, against loss or damage by fire or lightning. Said corporation shall be located in the City of Janesville, in the State of Wisconsin; shall commence business on the first day of January, 1891, and shall continue for the period of fifty years from that day in pursuance to articles of organization filed in the office of Commissioner of Insurance of the State of Wisconsin.

(Signed.)

A. H. Hollister.  
Christian Widule.  
Fred Esau.  
J. C. Huber.  
C. R. Bechmann.  
E. D. Pardee.  
W. G. Spence.  
J. M. Evans.  
H. D. Sykes.

E. B. Heimstreet.  
John A. Dadd.  
F. M. Givens.  
T. H. Spence.  
W. M. Edwards.  
R. Sauerhering.  
R. J. Washburne.  
Fred W. Isham.  
A. G. Ellis.

THE DRUGGISTS'  
MUTUAL FIRE INSURANCE COMPANY,  
OF WISCONSIN.

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BY-LAWS.

ARTICLE I.—DIRECTORS.

At the first Annual Meeting the Board of Directors shall elect from their own number a President and Vice-President; they shall also elect a Secretary and Treasurer.

ARTICLE II.

The Board of Directors shall fix the salaries and the amount of the bonds of the officers; shall elect from their own number an Executive Committee of three persons, and shall define the powers and duties of said committee.

ARTICLE III.

Three Directors may at any time call a special meeting of the Board by giving notice to all the other Directors one week before such meeting take place.

ARTICLE IV.—PRESIDENT.

The President shall preside at all meetings of the Company and Board of Directors; may call such special meeting of the Board as he may deem necessary. He shall sign all Policies of Insurance and all other papers that may be necessary in the transaction of the business of the Company, and shall perform such other duties as may be required of him by the Directors.

ARTICLE V.—VICE-PRESIDENT.

The Vice-President shall perform the duties of the President during his absence or disability.

ARTICLE VI.—TREASURER.

The Treasurer shall give bonds as required by the Board of Directors, and shall receive from the Secretary for safe-keeping all

moneys belonging to the Company, and shall distribute the same upon order signed by the President and Secretary, and shall render to the Board of Directors a statement of account with the Company every month or when requested by the Board of Directors, and to the Company at each Annual Meeting a financial report for the preceding year.

#### ARTICLE VII.—SECRETARY.

The Secretary shall give bonds to such an amount as may be required by the Board of Directors. He shall receive all moneys paid to the Company and turn the same over to the Treasurer. Shall keep all the books and papers of the Company as they are usually kept by Insurance Companies. Shall record all proceedings of the meetings of the Company and Board of Directors. Shall sign all Policies of Insurance, and orders upon the Treasurer and all other papers necessary for the transaction of the Company's business. He shall make a full exhibit of the affairs and condition of the Company to the Board of Directors every month and to the Company at its Annual Meeting. Upon request of any member he shall produce for inspection all books and papers of the Company.

#### ARTICLE VIII.—EXECUTIVE COMMITTEE.

There shall be an Executive Committee, consisting of the President and three members of the Board of Directors, who shall hold their office for one year and until their successors are elected and qualified. It shall be their duty to audit all accounts presented for payment and they shall have the power to transact the business of the Company upon the approval of the Board of Directors. They shall have the power to appoint agents and such employees as they may deem necessary for the Company.

#### ARTICLE IX.—POLICIES.

All policies shall take effect at 12 o'clock noon, and shall be for a term not exceeding five years.

#### ARTICLE X.—ASSESSMENTS.

On the first day of each month the expenses and losses of the previous month shall be determined and the rate per cent. which the sum of such expenses and losses combined, shall bear to the full face amount shall be assessed against each one, and be charged against them upon the books of the Company; but such assessments shall not be collected until such time as the Board of Directors shall order.

#### ARTICLE XI.—CASH PREMIUM.

An amount in cash equal to one annual premium shall be paid by the assured upon the issuance of each policy.

## ARTICLE XII.

These By-Laws may be altered or amended at any time as provided in the Charter of the Company.

Report was adopted and referred for publication

Messrs. Spence, Sauerhering and others spoke briefly on the benefits of the company. Mr. Spence stated that twenty-six thousand dollars had been pledged at the meeting of the committee, and at the present time some forty thousand dollars of insurance had been spoken for.

The Committee on President's Address announced they were ready with their report as follows:

## REPORT OF COMMITTEE ON PRESIDENT'S ADDRESS.

The Committee on President's Address present the following report:

On legislation to enable the medical profession to obtain a bill to regulate the practice of their profession, that we support the same, provided no absurd restrictions are placed upon pharmacists and the law is not made retroactive in its bearings.

The suggestions as to the treatment of the subject of cutting prices and selling to firms other than druggists of patent and proprietary medicines, brought forward by the Minneapolis Pharmaceutical Association, meet the case fully, and we endorse and advise the adoption of same by this Association.

The endorsement of patent medicines by pharmacists is highly reprehensible and cannot be condemned in terms too severe.

JOHN A. DADD,  
R. SAUERHERING,  
A. CONRATH.

Report received and on motion adopted.

Report of committee appointed last year to divide the State into districts from which to select the members of the Board of Pharmacy was called for and read by the secretary, the report being accompanied with list of druggists residing in the district of the retiring member, Adam Conrath.

MADISON, Wis, Nov. 20, 1890.

MR. E. B. HEIMSTREET, Janesville.

DEAR SIR:—The committee to whom was referred the matter of dividing the State into five districts, beg leave to report as follows:

The First District is to compose the Fourth Congressional District.

The Second District is to compose the First, Second and Fifth Congressional Districts.

The Third District is to compose the Third and Seventh Congressional Districts.

The Fourth District is to compose the Eighth Congressional District.

The Fifth District is to compose the Ninth Congressional District.

EDWIN SUMNER, Chairman.

Mr. E. D. Pardee and John A. Dadd concurring.

On motion of Mr. Sauerhering the report was adopted.

The Executive Committee then made their annual report:

#### REPORT OF EXECUTIVE COMMITTEE.

##### *To the Wisconsin Pharmaceutical Association:*

The Executive Committee have examined the books of the Secretary and Treasurer, and found them correct.

It becomes our sad duty to report the death of Harrison R. Doane, of Delavan, Wis. M. Doane was born in Girard, Pa., January 28, 1837, and was therefore 53 years of age at the time of his death. He served a term in the Union army, was a patriotic soldier and did his country gallant service.

He engaged in the drug business in Delavan in the year of 1876, and continued in this business up to the time of his death, which was caused by the accidental explosion of dynamite.

This Association deeply regret the loss and extend to his family and friends their heart-felt sympathies.

The Treasurer reports the names of thirty-nine members of this Association, who are two years in arrears for dues; nineteen in arrears for three years and three in arrears for four years.

We would recommend that the names of the following members who are three years or more in arrears be dropped from the roll:

David Hecht, O. A. Kropf, Milwaukee; F. B. Cleggett, Oshkosh; C. Pflugardt, Hilbert; C. V. Nanscawen, Fort Howard; E. Burnside, Ripon; J. E. Brayton, Ripon; J. A. Ditter, Fond du Lac; H. Enckhausen, Tomah; S. G. Andrews, Deerfield; Chas. Quinn, Grand Rapids; P. J. Loye, Sturgeon Bay; W. E. Kunze, Delafield; C. A. Emerson, Beloit; A. S. Bonneville, Ashland.

Respectfully submitted,

F. M. GIVEN.

T. M. CANFIELD.

A letter was read from the Wisconsin State Eclectic Medical Association, appointing Doctors J. V. Stevens, Prairie du Sac, N. F. Wetmore, North Freedom and Geo. Dale, Iola, as delegates from that Association. Paper placed on file.



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**REPORT OF THE COMMITTEE OF THE REVISION OF  
THE U. S. PHARMACOPŒIA.**

*To the Wisconsin Pharmaceutical Association:*

GENTLEMEN: Since our last meeting the Seventh Decennial Convention for revising the U. S. Pharmacopœia was held in the city of Washington, being called to order by President Amory, on Wednesday, May 7th; and after several sessions accomplished the necessary work of organization and outlined the general plan of the next Pharmacopœia. The Wisconsin Pharmaceutical Association was unfortunately represented by the chairman of this committee only, and in his opinion the work accomplished was most gratifying. It has long been a recognized fact that the present Pharmacopœia does not meet the requirements of either the pharmaceutical or medical professions in many particulars. To the former the "parts by weight system" was (speaking for a majority, and among them some of the most intelligent pharmacists of the land) a serious annoyance, and appeared from almost every conceivable point of view an unnecessary and cumbersome procedure. While uniformity and exactness are most desirable in pharmacy and medicine, the latitude occasioned by the very variable dosage of the preparations prepared by this system, both in relation to the same individual at different times, and to different individuals, the statement volunteered would seem to be warranted by these facts in connection with others which might be sighted. Strange as it may seem, the Metric system, which was so vigorously proposed ten years ago, and which it was thought best by the Committee of Revision then to substitute by the parts by weight system as a compromise, has at last been adopted by almost a unanimous vote, and were it not for the commercial system in vogue would be a most acceptable change. However this need not retard its general use for pharmaceutical purposes and must be regarded an advance, as now we will have a system not arbitrary, but one in which the weight and measure bears an exact relation.

The subject of standardization so freely discussed in the journals of late was also taken up and settled in a most satisfactory manner, except to the advocates of wholesale and indiscriminate standardization, for the resolutions adopted are circumscribed to a great degree.

Another important step, as commendable as it is bold, is the action taken on proprietary and patent articles, which it is well to quote here: "No substance which can not be produced otherwise than under patent processes, or which is protected by proprietary rights, shall be introduced into the Pharmacopœia." While this action will exclude from the Pharmacopœia

a large list of articles in general use, it is indeed commendable, and should have the universal approval of all pharmacists who have any regard for the future of the profession. Such products will continue to be placed upon the market, and while a few of them may have real merit the larger number do not and are forced upon the pharmacists at outrageous prices, and a demand created by the most liberal use of printers' ink and paper, allowing, as a matter of course, only a small compensation of profit to the dealer. Accepting as inevitable that such articles will be in demand, and their manufacture controlled as it is, we, by making them officinal, only aid in swelling the profit of those who do control them without an equal protection to the unfortunate consumer.

The subject of an officinal list of maximum and minimum doses was also considered, and owing to the extremely wide range of dose advised by different authorities, it was thought unwise and unsafe to incorporate such a list in the Pharmacopœia. The prevailing sentiment being that the substance must be given for physiological effect rather than on a quantity basis, the wisdom of this will be apparent to all who have given the subject serious consideration and especially when the posology of the different authorities has been compared.

Another important consideration was the publication of the Pharmacopœia, heretofore the price has been far above a figure necessary, and no doubt this factor has to a certain degree hindered the sale and general circulation of this work. It is fair to presume that the new Pharmacopœia, which the convention authorized the committee of revision to publish on its own account, will be placed on sale at a very moderate cost, thus leaving no good reason why every Pharmacist and Physician of the land should not have a copy for use and reference. The following are the resolutions adopted by the convention at Washington and by which the committee on revision will be governed in its labors.

**DRAFT OF THE GENERAL PRINCIPLES WHICH ARE TO  
GUIDE THE NEXT COMMITTEE OF  
REVISION, ETC.**

1. *Assay Processes of Drugs.*—It is recommended that assay processes be appended to the descriptions of the more energetic or otherwise important drugs containing active principles, provided the therapeutic value of the drug depends upon the amount of these principles, and provided, also, that these principles can be assayed and identified with reasonable accuracy and without requiring complicated processes. The committee may attach a note stating the usual percentage of these active principles in good com-

mercial samples of the drug, and, if it be found feasible, it may attach a requirement that the drug shall not be used unless it conforms to these limits.

2. *Assay Processes for Galenical Preparations.*—The committee may attach assay processes to such galenical preparations as fluid extracts, tinctures, etc., and shall adopt standards corresponding to those established under the preceding section, but it shall omit requirements of a definite strength or percentage of active principles except in the case of drugs for which an upper or lower limit or both, of active principles are prescribed.

3. *Assay Processes for Opium and Cinchona.*—In the case of opium and cinchona the committee shall adopt such processes of assay as will be found to yield the largest proportion of the desired active principles with greatest uniformity and with least manipulative difficulty, the object of these processes being to ascertain how much of the respective principles can practically be extracted.

4. *Descriptions of Chemicals and Tests.*—In the case of chemicals the degree of purity, or the allowable percentage of impurity, shall be described as closely as practicable. The standard of purity shall be set as high as practicable for legal enforcement, but not beyond a point reasonably attainable by the manufacturer without subjecting any particular product to unnecessary cost through the enforced removal of some harmless and insignificant accidental impurity.

5. *Chemical Formulas.*—Chemical formulas shall be given only in the new notation.

6. *Proprietary or Patent Articles.*—No substance which cannot be produced otherwise than under patented processes, or which is protected by proprietary rights, shall be introduced into the Pharmacopœia.

7. *Nomenclature.*—In the choice of titles of official articles it is recommended that convenience, established custom, and considerations of safety against mistakes, through similarity of or changes in names, should outweigh purely theoretical considerations or scientific preciseness.

8. *Specific Gravity.*—It is recommended that the committee define the exact degree of temperature of the standard by which other specific gravities are to be determined, and the specific gravities of the various official liquids shall be determined and stated by the committee, so far as it may be practicable on the basis of the established temperature and other conditions of the standard.

9. *Weights and Measures.*—It is recommended that the next committee of revision be instructed to direct solids to be weighed and liquids to be measured, except in such cases as the committees find it advisable to use parts by weight only and that the metric system be employed for that purpose.

10. *General Formula.*—It is recommended that general formulas be introduced for fluid extracts, and such other preparations as have duplicate products, and that the general formulas to be followed in any particular case be merely indicated by reference.

11. *List of Reagents, Tables, Etc.*—The tables and list of reagents authorized or prescribed for the Pharmacopœia of 1880 shall also be inserted in that of 1890, with such corrections or substitutions as may be required to bring them up to date.

12. *Publication of the Pharmacopœia.*—It is recommended that the committee of revision, etc., which will be elected by the convention of 1890, be authorized to print and publish, on its own account, the Seventh Decennial Revision of the Pharmacopœia of the United States of America.

13. *Date for the Pharmacopœia to go into Effect.*—The committee shall announce in a conspicuous place, in the printed work, a definite date, reasonably distant from the actual date of publication, when the new Pharmacopœia is intended to go into effect, and to supersede the preceding one.

14. *Compensation of Experts.*—It is recommended that the convention of 1890 instruct the committee of revision, etc., to pay the experts and others employed in the preparation and publication of the Seventh Decennial Revision of the Pharmacopœia.

Another recommendation made by the committee had reference to a matter of business, as follows:

*Resolved,* That the treasurer of the committee of revision and publication of the Pharmacopœia of 1880, be and is hereby, authorized and instructed to pay over any unexpended balances of money in his possession to the order of the Treasurer of the committee of revision and publication of the Pharmacopœia of 1890, and that all future unexpended balances of cash remaining after the liquidation of all just obligations be paid over from time to time to said officer.

In conclusion it was not thought best to burden the committee of revision with a detailed report of officinals, etc., since Wisconsin is very ably represented on this by our worthy Prof. F. B. Power, whose interest in the work, and ability to carry it out is beyond question. According to the action of the Association at

its last meeting this committee is to be a permanent committee appointed to act until the work of publishing the Pharmacopœia is completed and we will at all times be ready to render such assistance as may be asked of us by our State member or of the chairman, Dr. Charles Rice.

Respectfully submitted,

C. H. BERNHARD,

J. C. HUBER.

ADAM CONRATH.

The report was read by Prof. F. B. Power, Mr. Bernhard being absent.

A vote of thanks was extended by the Association to Mr. Bernhard and Prof. Power for the work done by them and the report was adopted and referred for publication.

Letters of invitation for meeting next year were read from Marinette and Palmyra Springs.

H. E. Turner, of Green Bay, was elected a member of the Association.

F. Robinson read a report from the committee on Mr. Dadd's paper "Closing Drug Stores."

WHEREAS, The Pharmaceutical Association of the State of Wisconsin, now in session believing, that the shortening of the hours, in all Pharmacies will be a benefit to the proprietors, giving their clerks and apprentices time for recreation and improvement in their profession, and believing, also, that the public will, by such an arrangement receive much better attention; we ask our friends and patrons to give us a helping hand, and assist us in this new and advantageous departure.

*Resolved*, That in the opinion of this Association, that all the respective Pharmacies, shall adopt the following hours for business: Open at 7 o'clock a. m. and close at 8 o'clock p. m., during week days, except Saturday, on which day it may be advisable to keep open until 9 o'clock p. m.; on Sunday the stores shall be open from 8 to 10 o'clock a. m., 12 to 2 and 5 to 7 o'clock p. m.; and that every Friday afternoon they shall close from 1 to 5 o'clock p. m.

F. ROBINSON.

Adam Conrath, the second member of the committee, presented a report:

Your committee desire to report on the recommendation in the paper of Mr. Dadd, that while we heartily endorse that the hours of Pharmacists ought to be shortened and hope that every Pharmacist in his own interest will do all in his power to bring it about, yet we believe that this is to such a great extent governed by local requirements and customs, that it would be unwise for this Asso-

ciation to fix any hours in which Pharmacies are to be kept open or part of days on which to be kept closed.

A. CONRATH.

Moved that Conrath's report be acted on first.

Mr. Robinson objected, stating that he thought the chairman of the committee was entitled to some respect in the matter, and thought his report should be taken up first.

R. D. Pulford said Mr. Robinson was correct and moved adoption of report as read by him.

Motion made that all part of report except relating to Sunday closing be stricken out.

Mr. Conrath objected.

Motion to lay on the table until afternoon was made and carried.

The Association then adjourned, having had one of the most pleasant and instructive sessions in its history.

#### FOURTH SESSION.

WEDNESDAY, 2 p. m., August 13, 1890.

Called to order, W. M. Edwards in the chair.

The Secretary read the following telegram from the Illinois Pharmaceutical Association:

KANKAKEE, Ill., Aug. 13, 1890.

*To Mr. E. B. Heimatrest, Secretary Wisconsin Pharmaceutical Association.*

DEAR SIR:—The Illinois Pharmaceutical Association from the sister state of Illinois send greeting. Hope you may accomplish much good for Pharmacy and your Association. May you long prosper.

HUGO W. C. MARTIN, Secretary.

R. Sauerhering moved that the papers as received from the Minnesota Association be adopted by this Association, also that they be printed in our proceedings. Motion carried.

John A. Dadd offered the following resolution as a substitute for the ones presented by F. Robinson:

*Resolved*, That it is the sense of this Association that the hours governing the service of Pharmacists, be lessened, and that hereby it is suggested that when practicable, that stores be opened on the days of the week from half past 6 a. m. and close at 9 p. m. Also, on Sunday they be opened an hour or two in the morning, one hour at noon and an hour or two in the evening. Carried.

Mr. Conrath was called on for remarks concerning early closing.

Mr. Conrath—"I do not know as I am prepared to say anything just now. There are two sides to the question."

Mr. Edwards—"I am glad that the subject of Sunday closing has been brought up before the Association, as it is one that will interest all of us. I will tell you how we have done in our place, at home, about this closing. I have been in business for years and have established a rule, that my store is to be kept open part of the time on Sunday, for the benefit of customers wishing prescriptions and medicines. I have my regular hours at the store, and my friends know when to call."

H. D. Sykes, Milwaukee—"I would like to say a few words on this subject, and am glad it has been brought up at this time, as it is one in which I am very much interested. About five years ago I commenced business; the first three and one-half years, I closed my store on Sundays, putting a notice on the door so they could find me if they needed anything in the way of medicines. Since coming to Milwaukee, I find that I can be near my store when wanted. I keep my store open morning and evening for the sale of drugs and medicines only. Did not sell soda water or toilet goods on that day. I understand that it created some little feeling, but I find that it can be carried out. I would be glad to close my store up all day on the Sabbath, and I think this move would be one of the grandest things we could do, and I only wish I had a little more time, or if I had been prepared, should have been glad to have had a paper on this subject."

Mr. Blestren, Eau Claire—"I think it would be a good thing to close stores on Sunday, but I do not see how it could be done in our town. I find that myself and those engaged in our store are kept pretty busy attending to the wants of our customers both on Sunday and week days as well. At one time there was a young man employed in the store with me, so we had every other Sunday off. The store was open part of the day only, we kept it up for a short time, but could not make a success of it. People would come continually for us to leave our homes and go the store to put up a prescription or give them some medicine. We now keep open most of the day, and for the past few weeks have not had time to go to our suppers. We have in our town thirteen drug stores and all of them keep open Sundays. I am the only one who has been sleeping in the store nights. There are no night clerks in the other stores, and so it gives me more to do perhaps, than some of them. Our Sunday trade is mostly prescriptions, and we put up from twenty-five to thirty prescriptions every Sunday; we feel it our duty to be on hand when our customers call, no matter whether it is on Sunday or in the night.

John A. Dadd—"We are very glad to hear from those present on this subject; we can not all think the same. If you would keep your store open all night people would stay in. If we would all keep our stores open on stated hours the public would accustom themselves to those hours. People do not appreciate your staying in all hours of the day and night, and if we want to make a change it must be done by ourselves. I bring to my mind an old saying, "Those who would be free, must themselves strike the first blow." So with the Pharmacists, for the public will never give up."

W. M. Edwards—"My experience is that the public will soon get accustomed to it."

Chas. Yates—"In Janesville they have adopted the rule of closing all the drug stores at certain hours on Sunday, and all of the proprietors have agreed to the plan, and I would like to hear from Mr. Heimstreet as to how the plan is working there."

E. B. Heimstreet—"Last spring the druggists of Janesville adopted the plan of keeping open Sunday from 9 to 10 a. m., 12 m. to 1:30 p. m. and 6 to 8 p. m., the plan has worked well and we are all satisfied with it. The physicians have become accustomed to it, and when giving prescriptions on Sunday, tell their patients to go at such hours. It gives us a rest and a chance to go to church once in a while."

There being no further discussion the substitute motion was put and carried.

Geo. Berg, of Appleton, applied for re-instatement as member of this Association. Ballott was passed and he declared re-instated.

John A. Dadd introduced the following:

*Resolved*, That, Doctor Frederick Hoffmann, of New York, editor of the *Pharmaceutische Rundschau*, being a gentleman of national reputation, and having by the interest shown by him in the advancement of the interests of the State School of Pharmacy manifested such good will, that we, in acknowledgment thereof, elect him an Honorary member of the Association, and that the Secretary be instructed to especially notify him of the fact.

The question was put and resolution adopted unanimously.

Secretary read following:

CHICAGO, July 22, 1890.

*Mr. Chas. C. Baumbach, Milwaukee, Wis.*

DEAR SIR:—As I learn the annual meeting of the Wisconsin Pharmaceutical Association takes place at Appleton, August 12th, in pursuance of the custom of our Association, and in the furtherance of continuing the kindly relations existing between the



members of the N. W. D. A. and the retail druggists of the United States, I request that you represent our Association at the meeting, extending to them cordial greetings, and the hope that they will appoint a delegate to meet with our Association, at our coming meeting at Washington, D. C., September 29th. Kindly asking your acceptance.

Yours truly,

PETER VAN SCHAAACK, Prest

Mr. Baumbach was called on and responded:

Mr. President and gentlemen of the Wisconsin Pharmaceutical Association—I am pleased to extend to you the greetings of the National Wholesale Druggists' Association, and trust our relations may always be pleasant. I trust you will be represented at our next meeting and this meeting will be a successful one and as profitable as those in the past."

The President then appointed Messrs. John A. Dadd, Adam Conrath, Milwaukee and R. Sauerhering, Maryville, as such committee.

Fred Eusan, of Milwaukee, then read a paper.

(See paper following minutes.)

Committee on School of Pharmacy reported as follows:

Your committee appointed to visit the Department of Pharmacy of the University, would report, that such visit was made on Tuesday, March 25, 1890, and the following gentlemen passed a satisfactory examination in practical pharmacy. The examination occupied some four hours. And your committee take pleasure in reporting that they found everything satisfactory.

Professor Power deserves great praise for the work he has done in this department, which has now a reputation second to none.

#### GRADUATES IN PHARMACY CLASS OF 1890.

D. A. Taylor, Sparta, Wis.; R. W. Wiese, Milwaukee, Wis.; C. F. Bancroft, Mount Horeb, Wis.; E. A. Wagner, Milwaukee, Wis.; F. W. Thiesen, Milwaukee, Wis.; Chas. Weschcke, New Ulm, Minn.; B. B. Collyer, Beloit, Wis.; G. E. Roth, Milwaukee, Wis.

Respectfully submitted,

F. ROBINSON.

A. CONRATH.

C. R. BECHMANN.

R. D. PULFORD.

E. B. HEIMSTEET.

Committee to whom was referred the proposed Code of Ethics, reported favorably to the adoption of such, and the same was adopted.

John A. Dadd proposed that at the next annual meeting, but one session should be held each day beginning at nine and continuing until one.

Mr. Edwards was in favor of it as it would leave the balance of the day to make acquaintance of each other and social recreations.

Helmstreet moved that at the next annual meeting but one session be held each day of four hours beginning at 9 a. m.

Motion carried.

President announced the next business would be selection of place of next meeting. Invitations were read from Marinette and Palmyra. Dr. Pulford proposed Milwaukee and made a lively five-minute speech on the advantages of that city. W. G. Spence and H. Rollman were appointed tellers. Informal ballot, votes cast, 25—Marinette, 1; Palmyra, 4; Eau Claire, 1; Milwaukee, 19.

R. Sauerhering moved to make the ballot formal, which was done, and Milwaukee designated as the place of next meeting in 1891; time, second week in August, 1891.\*

R. Sauerhering read paper: "A Short History of the Practice of Pharmacy."

(See paper.)

A vote of thanks was extended to Mr. Sauerhering for the paper.

This being the time for selection of three names to present to the Governor, from which he is to select one for member of Pharmacy Board. The President stated that ballots would now be passed and the three names having the largest number of votes would be considered elected. The ballot resulted as follows: Whole number of votes, 71—Kienth, 15; Ruenzel, 14; Schranck, 14; Conrath 12; Dadd, 10; Esau, 3; Sykes, 2; Froelich, 1.

John Kienth, H. G. Ruenzel and H. C. Schranck, all of Milwaukee, were declared the nominees.

#### ELECTION OF OFFICERS.

Tellers—W. G. Spence, H. Rollman. F. Esau

Informal ballot, votes cast, 22—R. Sauerhering, 13; M. Pfeifer 1; H. C. Schranck, 1; John A. Dadd, 3; H. Rollman, 1; C. S. Little, 2; Spence, 1.

On motion ballot was made formal and R. Sauerhering declared elected President.

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(\*NOTE—Since the meeting it was found that the G. A. R. held their meeting at Detroit the same week, and after consultation the President ordered the date changed to the first week in August. The next annual meeting will be held in Milwaukee, August 4, 5, 6, 1891.)

For 1st Vice President, votes cast, 21—Little, 20; Rollman, 1. C. S. Little declared elected.

2d Vice President, 17 votes cast—Evans, 5; Canfield, 2; Rollman, 3; Hawes, 1; Spence, 3; Pfeifer, 3. No choice.

Formal ballot, 20 votes cast—Evans, 11; Pfeifer, 8; Spencer, 2; Rollman, 3; Canfield, 1. Dr. J. M. Evans declared elected as 2d vice president.

For Treasurer fifteen votes were cast—W. P. Clarke, 18; scattering, 2. W. P. Clarke declared elected.

For Secretary—Moved that the treasurer cast ballot for E. B. Heimstreet as secretary objected to. Ballots were passed, 17 votes cast—E. B. Heimstreet, 16; Spence, 1. E. B. Heimstreet declared elected.

For Local Secretary—John Kienth, 9; F. Esau, 6; scattering, 4. Second ballot—John Kienth, 13; F. Esau, 4. John Kienth declared elected as local secretary.

Adjourned.

## FIFTH SESSION.

THURSDAY, 9:30 a. m., August 14, 1890.

President Edwards in the chair.

Geo. J. Schultz, of Antigo, elected to membership.

Committee on Exhibits made report. (See report following Minutes.)

Question of exhibits at next meeting being raised, A. Conrath thought it had better be left to the local committee, which was done.

A vote of thanks was extended to the retiring officers, and to the people of Appleton for courtesies extended by them. On motion twenty-five dollars was voted to secretary to pay extra expense incurred by him for reports. President appointed committees for ensuing year.

(See list of committees.)

John A. Dadd—"Mr. President, there is one thing that should be brought up at this time, and that is our annual dues. One dollar dues is not enough to pay the expenses of the Association, and I wish some action could be taken to make it two dollars per year."

W. P. Clark co-incided with Mr. Dadd and it was left to the Executive Committee to report on at next meeting.

The new officers was then introduced and escorted to seats.

Geo. J. Shultz, of Antigo and C. Emil Raben, of Racine, were elected to membership.

There being no further business the President declared the meeting adjourned, to meet at Milwaukee in August, 1891.

### REPORT OF COMMITTEE ON EXHIBITS.

*To the President and Members of W. P. A.*

GENTLEMEN:—Your committee to whom was referred the matter of Exhibits, would respectfully report a very creditable display, not so much from the number of parties represented, as from the number of new articles of beauty and utility, reflecting great credit upon manufacturers who, with commendable progress furnish something better each year.

Approaching from the session room we first encountered Mr. Charles W. Rice, looking after the interests of Lazell, Dalley & Co., perfumes, of New York. Mr. Rice makes a specialty of bulk goods.

E. E. Andrews representing The Seeley Manufacturing Co., perfumes, Detroit, Mich., in addition to his stock of perfumes has a line of imported cut glass ware and novelties pertaining to his line.

The Irondequoit Wine Company, on this as on every previous sessions of the W. P. A., has an elegant array of their products of the vinyard.

Peter Van Schaack & Sons, of Chicago, exhibits a full line of sponges of all grades. Their Salmander Sponge Case, a novel and useful article, is also on exhibition and its merits extoled by their representative, Mr. D. Lindiere.

T. W. Heinemann Company, of Chicago, manufacturers of Medicinal and Surgical Plasters, Antiseptic Dressings, Trusses, etc., have an elaborate display of their goods. Their Mr. Fred Cooke seems busy explaining the importance of an immediate investment in their chest protectors.

The Anderson Manufacturing Company, of Detroit, Mich., has on exhibition percolators, distills, triturate tablet machinery, prescription files, suppository moulds and general Pharmaceutica supplies, also a full line of the Torsion counter and prescription scales. Mr. E. S. Anderson is their representative.

The Steuben County Vineyard Association, of Bath, Steuben county, N. Y., represented by Mr. H. Underwood, state agent for Wisconsin and Michigan, displayed their wines and brandies.

Their goods are prepared for and shipped direct to the drug trade or medicinal purposes.

Dean, Foster & Co., of Boston and Chicago, represented by Mr. E. R. Dawley, had their usual display of glassware and druggists' sundries.

H. Neidecken Company, of Milwaukee, was represented by one of their firm, Mr. Edward Fisher. They devoted a large store room to an elaborate display of imported albums, plush goods, dressing and toilet cases. They are also manufacturers of stationery and blank books.

C. S. Longnecker & Co., of Chicago, presented an immense variety of albums, toilet, manicure and traveling cases, and a full line of plush novelties. They also carry a full line of zylite goods in brushes and mirrors, combs and fittings for manicure cases. The line has many new novelties and is in charge of Mr. J. E. Ryder.

Humiston, Keeling & Co., wholesale druggists, of Chicago, have interesting specimens of crude drugs, among them Russian Beaver Castor and an original package of Socrotine Aloes in a monkey's skin.

Solon Palmer, of New York, displayed his celebrated perfumes and toilet articles.

Eli Lilly & Co., of Indianapolis, has an artistic display of their pills, granules, tablets and elegant Pharmaceutical preparations.

Chas. Baumbach Company, of Milwaukee, had a good display of sponges.

The Pabst Brewing Company brought a display of their "Best Tonic."

Respectfully submitted,

W. G. SPENCE.

J. M. EVANS.

R. SAUERHERING.

Committee.

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#### REPORT OF COMMITTEE ON AMUSEMENT.

**SACK RACE**—Max Gessler, Milwaukee, Silk Umbrella, Green & Button Co.

**SHOOTING**—Adam Conrath, 1 gal. Elix. Beef, Iron and Wine, Eli Lilly & Co.

**PILL MAKING**—Geo. T. Schutz, prescription file, Anderson Manufacturing Company.

**WHEELBARROW RACE**—Max Gessler, jar and pedestal, The Chas. Baumbach Company.

**SHOOTING MATCH**—F. Cooke, men's shaving set, Drake Brothers.

POTATO RACE—R. E. Kneer, graphoscope, Neidecken & Co.

GENTS' GUESSING—Dr. Evans, formulary, Lord, Owen & Co.

FAT MAN'S RACE—James Dana, kip chamois, Humiston, Keeling & Co.

LEAN MAN'S RACE—D. Lindner, silk umbrella, Greene, Button & Co.

HEAVIEST DELEGATE—Ed. T. Mallory, 207½ lbs., ¼ lb. Dykes' pepsine, F. Stearns & Co.

LIGHTEST DELEGATE—H. M. G. Blestien, 115¾ lbs., ¼ lb. Dykes' pepsine, F. Stearns & Co.

LADIES' GUESSING—Mrs. J. C. Foye, bottle perfume, Greene and Button Co.

CRUTCH RACE—Geo. T. Schutz, album, The Western News Company.

BASE BALL—Nine bot. Irondequoit wine for winners of the game, Irondequoit Wine Co.

BARREL RACE—Max Gessler, bottle perfume, Lazell, Dalley & Co.

EGG AND SPOON RACE—(Ladies only) Mrs. Otto Kuehmsted, bot. perfume, Solon Palmer.

MOST POPULAR LADY—Mrs. Charles S. Little, dressing case, Dean, Foster & Co.

MOST POPULAR VISITING LADY—Miss D. Hudson, toilet chamois, Morrison, Plummer & Co.

FOOT BALL—Ed. F. Mallery, foot ball, Goodyear Rubber Co.

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## PAPERS READ AT MEETING.

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### WHAT IS THE BEST EXCIPIENT FOR PILLS?

QUERY—WHAT IS THE BEST GENERAL EXCIPIENT FOR PILLS FOR DISPENSING PURPOSES?

There has been so much written on this subject that I do not expect to write anything that will be new to the live pharmacist, but realizing that to make our pharmaceutical meeting a success we must all "put our shoulder to the wheel," and knowing that often at the last moment parties to whom queries have been assigned come up with the excuse that for the want of time their papers are not ready, and that after reading this one I would

probably not be called upon again, I accepted the query "What is the best general excipient for pills for dispensing purposes?" To give a formula for an excipient that would answer the requirements of all pill prescriptions would of course be impossible.

In making a good pill the physical and chemical properties of the constituents must be taken into consideration. We very frequently see in the drug journals a formula for the best pill excipient; we try them awhile and then drift back to the old and well-tried methods.

The text books on pharmacy treat very fully on pill excipients, and give us a wide range to choose from. Glycerite of Starch is a good general excipient, but great care must be taken not to get the mass too soft. I have had considerable trouble on account of pills becoming soft after being made with this excipient, and I find that all the excipients containing glycerine that I have ever used are open to this objection, and it should not be used in pills that are to be sugar or gelatin coated. There is a growing demand for ready-made sugar and gelatine coated pills. Where we formerly kept fifteen or twenty different varieties of coated pills, the number of different varieties now run up into the hundreds.

There are several reasons why this is so. They are usually nicely coated, and it takes less time to count out twenty-four pills than it does to make them. Competition between the manufacturing pharmacists has made them cheap. It takes too much time for the busy pharmacist to sugar or gelatine coat a dozen pills; the patient is liable to get well and never call for them. It is less trouble for the physician to write *Pil Neuralgic*, Gross No. xii or look at his hand book and prescribe some other ready-made pill than it is to write out a formula.

But what has this to do with the best excipient? Just this: At the present rate of increase in the demand for ready-made pills, the art of pill making with the dispensing pharmacist will not need a pill excipient, but will have to study a quiz compend to be able to answer the questions at the examinations of the State Board of Pharmacy; and even now I find that with a bottle of *Powd. Acacia*, *Powd. Soap*, *Powd. Licorice* and simple *Syrup* I am able to make a large majority of the extemporaneous pills.

There are exceptions to this rule — Oxidizable substances, *Croton Oil*, etc. In making *Potassium Pills* I have had the best success with *Powd. Soapstone* and *Petrolatum*. In making *Croton Oil* pills I use cracker crumbs. For *Quinine* or *Cinchonia* pills I use a small quantity of *Tartaric Acid*; it makes a smaller pill and a permanent mass.

Many of our physicians are prescribing pill mass to be put into capsules. This, I think, is a step in the right direction, and if

neatly put up they make as nice a preparation as a coated pill, with the advantage of always being fresh.

FRANK M. CROW,  
Evansville, Wis.

### QUERRY 2.—PROCEEDINGS 1889.

#### DO THE SEIDLITZ POWDERS MADE BY RETAIL DRUGGISTS MEET THE REQUIREMENTS OF THE U. S. P.

The Pharmacopœia directs that a Seidlitz Powder be composed of 35 grains Tartaric acid, 40 grains of Bicarbonate of Sodium and 120 grains Rochelle salts, all in fine powder. The acid to be enveloped in a paper separately from the mixture of salts and soda. When all these ingredients are in a perfect condition, as it is supposed they should be, the whole will make a solution, when dissolved in water, that is very near neutral. In practice, however, it will be observed that the solution will turn out alkaline, which may be due to mixture adhering to the tartaric acid or to an imperfect soda. The discrepancy is, however, so small as to be of little consequence.

It does happen at times that the acid of commerce is very moist and it becomes necessary to dry the same before weighing of the quantity for the powders, as in fact it is well to test all the material, to see if they meet the required standard.

When making Seidlitz powders, it is customary in most Pharmacies, as a matter of convenience and expediency, to measure the acid and mixture in preference to weighing. When the measuring is carried out with proper care and precaution, by a person of skill and practice, the powders can be made to vary but little from the prescribed weight, but when this is left to some junior member of the force, the deviation may become great and objectionable. The looseness with which the putting up of the powders is carried on, is greater than one may think. When it becomes a fact that one can procure a powder at a dozen different places and not find two alike, it becomes a matter which ought to be considered, and when it becomes a fact that a Pharmacist actually swindle as has been found to be the case, then it is time that this be stopped.

There are few remedies that are of such universal use as seidlitz powders. A person in the habit of using them will readily single out the vender that makes it a point to have them correctly made and give him his patronage.

When procuring material for this paper it was the intention to take it from different localities in the state, but when it was found that so great a difference existed in the powders in the city, it was



thought superfluous to go to any more trouble and expense, for it could be sufficiently demonstrated that the manufacture of seidnitz powders need a little more care by all of us.

The purchases were made in twelve stores in Milwaukee, buying one powder in each, and taking care that nothing was wasted. The best and poorest Pharmacies were patronized.

The examination was conducted as follows:

The ingredients of the white and blue papers were weighed, then dissolved together in water, the carbonic acid expelled by heat and then tested. If acid, the excess was at once determined volumetrically with a solution of soda. When the solution of the powder was alkaline, it was acidified with a known quantity of tartartic acid and then determined in the usual way.

Number 13 is a powder made from material as found on the shelf, and for comparison, treated the same as the rest. No. 5 is an evident fraud, No. 12 appears to have part of the salts substituted by soda, either accidentally or with intention. No. 1 appears to think that a weak powder is good enough, while No. 11 works on the principle of double strength. Nos. 2 and 10 will pass, while No. 9 may be considered perfect, the balance appears to owe their discrepancies to want of care in the manufacture. So from the twelve powders we have only one that meets the requirements of the Pharmacopœia.

No.	Weight of Acid.	Weight of Mixture.	Reaction of Solution.	Excess of Acid.	Excess of Bicarb. Soda.
	Grains	Grains		Grains	Grains
1	30	134	Alkaline.	.....	1.4
2	39	158	Acid.	3	.....
3	42	163	Acid.	6	.....
4	47	166	Acid.	9.12	.....
5	8	96	Alkaline.	.....	34
6	37	114	Acid.	9.56	.....
7	37	157	Acid.	5	.....
8	52	150	Acid.	9.7	.....
9	35	162	Alkaline.	.....	2.8
10	38	170	Neutral.	.....	.....
11	49	180	Acid.	11.8	.....
12	43	166	Alkaline.	.....	20
13	35	160	Alkaline.	.....	1.4

A. CONRATH.

### QUERY NO. 9—WEIGHTS.

ARE APOTHECARIES' WEIGHTS VARYING FROM THE GRAIN TO THE DRAM AS SUPPLIED TO PHARMACISTS GENERALLY RELIABLE?

As a general rule we can call them reliable, the difference being very little.

The weights I compared were manufactured by H. Troemer and a Chicago firm. As a correct and reliable weight I took the metric system. I first compared them on a Troemer scale sensitive to one-fiftieth of a grain, but to convince myself of the reliability I weighed them on an analytical scale sensitive to one-hundredth of a grain. Here I found but a very slight difference between the the different makes, and they very closely correspond to the legal metric weights, there being but a few milligrams difference, which the table below will show.

I also weighed some old weights which had been used for about six years and found them to be slightly deficient, which I think comes from the handling and the cleaning they got during their service.

H. Troemer's Aluminium.	Chicago Aluminium.	Chicago Brass.	United States Standard.
Grains.	Grains.	Grains.	
1—.068	1—.064	1—.066	.065
2—.129	2—.130	2—.129	.130
3—.192	3—.191	3—.193	.195
4—.260	4—.260	4—.263	.260
5—.323	5—.323	5—.324	.324
10—.649	10—.645	10—.649	.650
	21 or	20—.1293	1.300
	3 ss or	30—1.936	1.950
	211 or	40—2.573	2.600
	31 or	60—3.873	3.900

#### OLD WEIGHTS USED SIX YEARS.

1 drachm .....	—1.283
½ drachm.....	—1.922
2 scruples .....	—2.572
1 drachm .....	—3.863

FRED ESAU.

#### SYRUPS OF THE PHARMACOPŒIA.

The greater portion of the syrups of the Pharmacopœia lack a very important quality, that is, they are not sufficiently staple. We may take the best of care to make a perfect preparation. We

may keep it in the most favorable location, yet it will happen that a syrup is dispensed that ought to have been discarded.

A number of them are household remedies with the public and very often an occasional patient is dosed with the same, long after it is spoiled. A tainted syrup, in a medicine, may at times prove of great danger to a patient in a critical condition, and may cause symptoms that puzzle the physician. This ought to be remedied. Our syrups ought to fill the purpose they are intended for, and at the same time be reasonably staple in a warm climate or during the summer months. They can not, or at least a number of them, be made extemporaneous to perfection, or we might resort to this method to furnish a fresh article whenever wanted. A single solution of sugar in water, to hold the active principle or the flavor of organic substances, does not meet the requirements. As we are to have a new Pharmacopœia in the near future, it would be well that the respective committee give this matter all the attention it may merit. There is no class of preparations that need an overhauling more than the syrup.

It appears that a step in the right direction has been made in the present formula for syrups *Pruni virg.* by adding glycerine. Why could not a certain percentage of sugar and water be replaced by glycerine in all syrups holding organic matter in solution, or is otherwise prone to deteriorate? They would certainly become more staple and the addition would hardly affect their character otherwise, at least not materially. As a matter of experiment, I made last February, now six months old, some hive syrup, in which approximately 7 per cent. of the sugar and water are replaced by glycerine, a sample of which is herewith presented. This sample is apparently in a perfect condition, although it has been kept in a warm store all this time and was repeatedly opened. Also a sample of *syrupus limonis* is herewith presented in which 10 per cent. of the sugar and water are replaced by glycerine; this sample is only two months old, and therefore, can not be said to be fairly tested. It was kept in a warm place all the time, was repeatedly opened and yet it appears to be intact.

As a matter of illustration I will here described how the formula of the Pharmacopœia for *syr. limonis* was modified:

Take 40 parts of lemon juice, heat to boiling and allow to evaporate sufficiently so that 36 parts of filtrate is obtained; to this add 10 parts of glycerine and 54 parts of sugar. and dissolve by agitation without heat.

A. CONRATH.

## ON THE KEEPING OPEN OF PHARMACIES DURING THE ENTIRE DAY ON SUNDAY.

After a close observation of the subject for the past forty-five years, and being an active participant in the unpleasant and burdensome duty imposed, the idea has frequently presented itself to my mind that an effort should be made to mitigate the burden the followers of our vocation are obliged by this useless custom to bear.

Noting on a journey abroad some eight years ago that in the largest city in the world, containing five million inhabitants—London—pharmacies were not kept open the entire Sabbath, it struck me that if not requisite in that vast aggregation of people, why should it be in countries much less in size?

I believe it is the custom there to open the pharmacy an hour or two in the morning, closing at church time, an hour at noon, again closing till six or seven in the evening, and remaining open until the final closing hour. Such was the method when an apprentice myself in that city.

What modifications or changes have been introduced lately I have no present information, but am aware that pharmacies are not kept open on week days as long as those of this country, the time of closing being 9 o'clock p. m., while here it is 10, 11 and sometimes midnight before the lights are put out. Combining this with Sunday service, it is a great injustice and positive injury to the pharmacist of the day. It takes from him all opportunity of improvement and vacation, depresses his energies and affects his bodily health; he is employed the long hours of the day, is expected to answer calls at night, public holidays have no rights for him; his position is by no means a sinecure, nor one possessing such charms as to make it eagerly sought for.

The reason adduced that our places of business should be kept open is that it is a public requirement—that medicine or other necessities may be needed at any unexpected moment. This assertion will not bear critical analysis. During the forty years I have followed this vocation in this country I cannot call to mind one urgent call of sudden sickness or accident on this day at my store or others in which I have been engaged. I will not assert it so in all cases, but the occasions on which such a necessity may arise are exceedingly rare, and when such cases do occur, physicians are usually supplied with the requisite means to meet them. I will admit that certain things may be required on a Sabbath, such as prescriptions renewed, new ones compounded, and many domestic remedies. The opening at certain hours of the day will meet these requirements, but that the store should be kept open continuously from early morning till 10 or 11 o'clock at

night is utterly unnecessary and an imposition on those who are in attendance, depriving them of that rest which is necessary to all. Sunday service is principally devoted to selling soda water, cigars, perfumery and other articles that could as well be obtained during the week as on the Sabbath. I must not forget to add to the above postage stamps, the profits on which, speaking in a sarcastic sense, add so much to the lucrateness of our business, and in which on this day a most extensive trade is done.

A pharmacist, of all those who carry on business, needs as much rest, nay, more than others; he is actively employed, both physically and mentally, more hours than those in any other vocation during the days of the week, yet he is called upon to put in the Sunday service when the rest of mankind are relieved of the burdens of business.

This state of things can be changed if the members are willing. The fault is a great deal their own, the indulging motive that really actuates the case is cupidity, the making of money. The store cannot be closed for the fear that a few cents or perhaps dollars may be lost. The commercial spirit is unfortunately the prevailing one that dominates our following, and until a more enlightened one is developed I am afraid this evil will not be remedied. I bring this subject up for consideration, not that I expect any immediate action, but that the object may be kept in view, and that the rising generation of pharmacists may disenfranchise themselves from the bondage of their predecessors.

Slavery of the body has been abolished in this country; now let us destroy this slavery of the mind and soul, that also enslaves the body, and do away with such arbitrary, useless and demoralizing customs.

JOHN A. DADD.

August, 1890.

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## IN ANSWER TO THE QUERY FOR A SHORT HISTORY OF PHARMACY.

### EXTENDING BACK TO THE REMOTEST TIMES.

The Assyrians, when history is traced back 36,500 years B. C. left the impress of their civilization on Central Asia, and among the Chinese, Ching Nong, a contemporary of Menes I, of Egypt, 3393, B. C., was learned in pharmacy and botany. Among the Egyptians pharmacy obtained early, a high standing. A papyrus of the reign of Lent, 3300 B. C., gives direction for the preparation of medicine and in the Ebers papyri, 1600, B. C., is a formula containing prescriptions from Assyrian physicians. At this time pharmacy in

Egypt had obtained the same status as at the time of Galen Claudius, 200 A. D.

The Greeks from an early period had some knowledge of pharmacy, as they had built a temple to Aesculapius and Hygiea, about 187, B. C.

In the second century, B. C., Dioscorides wrote a book on pharmacy and botany, which was authority until into the 17th century A. D.

Galen Claudius, about 180, A. D. was a celebrated physician, pharmacist and botanist. He introduced the art of obtaining the aroma of plants by distillation.

Alexander Trallianus, in the 6th century used Colchicum in gout, iron in anaemia, rhubarb in liver complaint, and introduced the mixture of *Hiera picra* as a anthelmintic.

Pope Gregor, the Great, enunciated the dogma of homœopathy, which had been known among the Chinese several centuries before.

The Saracens united the Cushito Aryan, Graeco Roman and Graeco Egyptian schools of pharmacy and medicine, and separated pharmacy from medicine as early as the 8th century, establishing this fact by law in the 10th century.

The celebrated school at Salerno, founded 640, A. D., compelled its graduates to swear neither to accept nor give a precentage on prescriptions, and when the Saracens obtained control of this school of pharmacy it was separated from medicine, but placed under the surveillance of the medico college.

In Germany the first apothecary shop mentioned was in Muenster, 1267; in Augsburg, 1285; in Hildesheim, 1318.

In Belgium, in 1297; in France, 1336, and in London, 1345.

The City of Nuerenberg had early passed an ordinance separating pharmacy from medicine, which was followed in France and England in the 16th century.

Philippus Theophrastus Von Hohenenheim, known as Paracelsus, born 1490 in Einsiedlen, introduced tinctures, extracts and chemicals, and invented the formula, "*Similia Similibus Curantur*," which was later adopted by Hahnemann. His writings were in the German language, contrary to the use of the Latin.

In the later part of the 16th century pharmacies became overcrowded in Belgium and other European States, and a law was passed in 1582 defining the qualifications of persons for opening a pharmacy. Kings and Cities passed laws and ordinances to the same effect to ameliorate this state of things.

Pharmacy in Germany in the 16th century was recognized as of great importance, and in war times field pharmacies were established.

The first work, which we can call a dispensatory, was written by Valerius Cordus, born in Hessen, 1515, which was published in Nuerenberg, 1546. It contained collections from Greek, Roman and Arabian physicians. This work was republished in Paris, 1548; in Lyons, 1552, 1559 and 1599; in Venice, 1556 and 1563, and in Antwerp, 1580.

The city of Lyon published a pharmacopœia in 1543. The city of Nuerenberg passed an apothecary ordinance directing the use of the work *Luminaræ Majus*, by Alex. John J. Manlius de Bosoo, as a text book.

In the seventeenth century American drugs were introduced in Europe. In Germany during this century apprentices had to serve from five to six years and had to pass an examination, requiring also some knowledge of latin, before they could enter upon the duties as clerk, and before becoming proprietors of a pharmacy had to pass another examination.

The first English pharmacopœia was published in 1618, republished in 1650, 1677, 1721 and 1746.

In Prussia the first dispensatory was published 1698.

In English-speaking America, at this century, pharmacy was based on English custom modified by Indians. In 1636 Virginia passed a law regulating the fees of surgeons and apothecaries.

In Massachusetts pharmacy was mostly in the hands of schoolmasters, clergymen, women and Indians. The first pharmacy known in Boston was in 1646. In New Jersey the Duke of York passed a law regulating the practice of pharmacy. Salmon's herbal, 1689, was highly esteemed as a text book in botany.

The apothecary shops in Germany of the 18th century did show great improvements, even elegance in appearance.

In 1794 Trommsdorf published a pharmacal journal and founded a chemist pharmacal institute in 1795 which was largely attended.

In New York, Tagree was a recognized pharmacist in 1703, Governor Hunter in 1719, soon followed by the Van Burens and John Johnson in Perth Amboy.

The first patent medicine, Tusearora Rue, was made by Mrs. Marsten in 1711; also Indian medicines were sold, but the sale of the latter stopped by law in New Jersey 1772.

Prominent practitioners at this time were Rev. Jonathan Dickinson, of Elizabethtown; Dr. Lawrence Vandever, of Millstone; Robert Eastburn, of New Brunswick, and some others. As text books the Americans depended mostly on the London, Edinburgh and Dublin pharmacopœia. By the efforts of Dr. Tilton, of Delaware, the first American pharmacopœia was published in 1778. Dr. Wm. Brown, a surgeon in the federal army, published a small pharmacopœia in the latin language in 1778 in Pennsylvania.

In the 19th century the first effort to issue an American pharmacopœia was made in Boston by the Massachusetts Medical Society in 1805, and this work published 1808, containing 272 pages.

In New York the society called The Physicians and Surgeons of the New York Hospital concluded in 1815 to issue a pharmacopœia, and Drs. S. L. Mitchell and V. Seaman were requested to compile one. The compilation was accepted in October the same year and published February, 1816. This work entirely ignored the Massachusetts pharmacopœia.

In 1817 Dr. L. Spalding, of New York, introduced at a meeting of the New York County Medical Society a resolution to publish a national pharmacopœia, and to this end to invite the Eastern, Middle, Western and Southern medical colleges and associations to hold meetings of delegates from such colleges and associations of the different sections of the States to formulate plans for a new pharmacopœia, to be submitted to a pharmacopœia convention in 1820, and further to hold such conventions for the revision of the pharmacopœia every ten years. This resolution was referred to a committee and accepted in 1818.

The convention met in 1820, the plans of the Eastern and Middle State colleges and associations were submitted and consolidated, (the Western and Southern State colleges and associations had not held any meetings) and the pharmacopœia published in 1820. The convention appointed a committee to call another convention in 1830. At the meeting of the convention in 1830 only eight delegates were present and the general surgeons of the army and navy were invited to seats. The plan of the Pennsylvania delegates for the new pharmacopœia was accepted and a committee of revision appointed consisting of two delegates from each of the cities of Boston, New York, Philadelphia, Baltimore, Washington, Charleston, Lexington and Cincinnati. All delegates appointed accepted except those from New York. The revision committee met in Philadelphia in October, 1830, the accepted plan was adopted, and Drs. Wood, Bache and Bigelow were appointed as the publishing committee. These submitted the plan to the Philadelphia College of Pharmacy, and the new pharmacopœia published in 1831 in the latin and English languages.

At the same time that the convention of 1830 sat, there met in New York a rival convention and published a pharmacopœia in 1830. This rival convention was very meagerly attended, and their work did not find many followers.

The first American Dispensatory was published by Wood & Bache in 1833, and republished with timely additions and revisions up to the present time sixteen times.



At the convention of 1840, by the influence of Drs. Wood & Bache, the committee of revision permitted that members of the Philadelphia College of Pharmacy may take part in the deliberations of the committee.

The convention of 1840 concluded to invite delegates from the Pharmaceutical Colleges and Associations to take part in all future Pharmacopœia conventions; which has been done.

The National Pharmacopœia conventions for the years 1850, 1860 and 1870, assembled in regular order and had the respective pharmacopœia published in due time.

In 1875, Dr. E. R. Squibb submitted to the American Medical Association, a resolution, that this Association should publish the Pharmacopœia, but this resolution was finally rejected by the Medical and Pharmaceutical Associations.

At a meeting in 1878, of the College of Pharmacy, of Philadelphia, Dr. Charles H. Thomas made the remark, that he had studied the Pharmacopœia of many different countries and had come to the conclusion, that the German Pharmacopœia should be taken as a model for the next and all future American Pharmacopœies.

At the meeting of the American Pharmaceutical Association in 1872, in Toronto, Dr. Fred Hoffmann submitted a resolution, that this Association should take a more active part in revising the Pharmacopœia, and that a committee should be appointed to work out a plan for the revision of 1890, and submit the same to the next convention. The resolution was adopted, and Dr. Fred Hoffmann, and fourteen other gentlemen were appointed as such committee.

The National Pharmacopœia convention assembled in Washington, in May, 1890, the report of the aforesaid committee was submitted, and referred to the committee of revision. The Pharmacopœia was published in 1892.

The National Pharmacopœia convention of 1890 instructed the committee of revision to use the metric system of weights and measures in designating the quantities for making the pharmaceutical preparations.

The many discoveries in chemistry in this last quarter of a century have added great many new articles to the materia medica; among others the synthetic made drugs.

As very nearly all States in our Union have passed a pharmacy law defining the standard of qualifications of pharmacists, and which standard is raised to a higher proficiency almost every year, we can safely trust to the future and believe that our profession will always keep abreast with the times.

R. SAUERHERING.

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### NOTES OF THE MEETING.

The proceedings were reported by Miss Edna E. Walters, of the Sanders' School of Phonography, Janesville, Wis.

The amusement program was successfully carried out, and C. S. Little and the local committee were highly commended by the visitors.

Wednesday morning the visiting ladies of the Association were given a ride about the city, visiting all the principal points of interest.

Tuesday evening the celebrated Arion Band of Oshkosh, which had been engaged for the occasion, entertained the druggists with a delightful promenade concert in the park.

At the conclusion of the meeting, the retiring president, W. M. Edwards, was presented with a beautiful rosewood gavel. The presentation speech being made by R. D. Pulford.

Wednesday afternoon the mills and factories were visited, after which various games were indulged at the park. The races were hotly contested, and called forth much merriment and applause.

The convention ended with a parade and grand serenade to Mayor Levings and the resident druggists. At the same time Mr. C. S. Little was presented with a handsome rocking chair by the traveling men and representatives.

Wednesday evening there was a grand ball at the Armory, attended by a very select gathering. Dancers and spectators were numerous, and the happy expressions showed that the event was being enjoyed by all. Refreshments were served at midnight, after which dancing was resumed to the early hours of the morning.

The last thing on the programme was the excursion to the Lake Park at Neenah. The steamer was well filled. Band and vocal music was plentiful. At the park a fine lunch was served by the ladies of Neenah, after which dancing was enjoyed in the pavilion until time for departure. The return trip at sundown, with its beautiful twilight scenery, will long be remembered.

## DRUGGISTS' REGISTER.

Following is a list of druggists registered at the Appleton meeting, quite a number failed to register and the attendance was much larger than even this list:

Adrews, C. E., Beloit.  
 Anderson, E. S., Detroit.  
 Anderson, O. W., Appleton.  
 Bleastrom, H. M. G., Eau Claire.  
 Berg, Geo. W., Appleton.  
 Burrit, Thos., Oakfield.  
 Blackburn, A. T.  
 Bergwold, E. A.  
 Burdick, I. D., Janesville.  
 Barrett, M. E., Neenah.  
 Baso, M. H. Oshkosh.  
 Baumbach, Chas., Milwaukee.  
 Bartell, Max, Milwaukee.  
 Brown, F. M., Hortonsville.  
 Collyer, B. B., Clinton.  
 \*Clarke, W. P., Milton.  
 Campbell, A. A., Durand.  
 Carlisle, W. W. Durand.  
 Crombie, S. M., Indianapolis.  
 Cooke, Fred, Chicago.  
 \*Cook, J. H., Appleton.  
 Cook, H. W., Appleton.  
 Conrath, A., Milwaukee.  
 Camfer, J., Milwaukee.  
 \*Crawford, W. C., Oshkosh.  
 Curtis, J. W., Madison.  
 \*Canfield, T. M., Necedah.  
 \*Comstock, M. D., Fond du Lac.  
 Conradi, Aug., Madison.  
 Charlesworth, F. M., So. Kaukauna.  
 Dawley, E. B., Chicago.  
 Dadd, J. A., Milwaukee.  
 Dale, Geo. M. D., Iola.  
 Dohmen, H., Milwaukee.  
 \*Dunlap, E. E., Waukesha.  
 Dudley, Jas., Ahnapee.  
 Dana, J. T., Fond du Lac.  
 Dick, W. H., Milwaukee.  
 \*Evans, Dr. J. M. Evansville.  
 \*Ellis, A. G., Brooklyn.

\*Edwards, W. M., Portage.  
 Engsborg, C., Lake Mills.  
 Erhart, G. A., Fond du Lac.  
 Esau, F., Milwaukee.  
 Ericksen, A., Waupaca.  
 Fischer, E., Milwaukee.  
 Froelich, J. A., Oshkosh.  
 \*Gruelick, Jos., Appleton.  
 \*Gates, W. H., Milton Junction.  
 \*Givens, F. M., Fond du Lac.  
 Grimmer, F. E. Mauston.  
 Griffiths, W. G., Beaver Dam.  
 Gray, E. T., Chicago.  
 Graves, Chas., Wausau.  
 \*Hawes, J. A. Appleton.  
 \*Helmstreet, E. B., Janesville.  
 \*Huber, J. C., Fond du Lac.  
 Helmstreet, A. M., Janesville.  
 Hamilton, F. H., Milwaukee.  
 Hilfert, H. O., Appleton.  
 Hannon, F., Ft. Howard.  
 Johnson, A. H., Veroqua.  
 Nneer, B. E., Eau Claire.  
 \*Kuehmsted, O., Appleton.  
 Kamps, J. H. Appleton.  
 Kienth, John, Milwaukee.  
 \*Kent, W. E., Fond du Lac.  
 Kenyon, G. U., Elkhart.  
 Kaiser, W. T., Milwaukee.  
 Kostberg, A., Milwaukee.  
 Kuentz, W. J., Milwaukee.  
 Kirkby, W. C., Racine.  
 Lindner, D., Chicago.  
 \*Little, Chas. S. Appleton.  
 Lightner, J. A., Randolph.  
 Luchenbach, O. H.  
 Lightner, T. S., Randolph.  
 Lyon, W. B., Elkhorn.  
 Lange, J. J., Lincoln.  
 \*Mallory, E. F., Milwaukee.

\*Mertes, Anton, Appleton.  
 Masbaum, J., Crandon.  
 Ryder, J., Chicago.  
 \*Montgomery, W. F., Appleton.  
 Morrison, A. C., Milwaukee.  
 Merkel, Geo.  
 Miller, W. P., Appleton.  
 Meyer, E. E., Sheboygan.  
 Mead, J. L., Kenosha.  
 Marsh, E. P., Neenah.  
 Messing, J. F., DePere.  
 McDonald, T., DePere.  
 Masilka, F. V., Muscoda.  
 Norris, C. W., Chicago.  
 Neher, J. H., Eau Claire.  
 Otto, A. C., Centraia.  
 Pritzlaff, B., Milwaukee.  
 Pulford, R. D., Mineral Point.  
 Passino, F. G., Kaukauna.  
 Pfeifer, Chas., Plymouth.  
 Popp, I. A., Wrightstown.  
 Pfeuger, W. T., Chicago.  
 Power, F. B., Madison.  
 Patten, E. B., Waupun.  
 \*Pittman, M. B., Boscobel.  
 Rice, C. A., New York.  
 Rhodes, J. H., Chicago.  
 \*Robinson, F., Kenosha.  
 Ruenzel, H. G., Milwaukee.  
 \*Rollman, H., Chilton.  
 Rather, E., Wrightstown.  
 Ridsout, A. F., Hortonville.  
 Ritter, J. H., Oshkosh.  
 Raymond, Ed., Oshkosh.  
 Robinson, John, Green Bay.

Stoetzer, H., Milwaukee.  
 Sauerhering, R., Mayville.  
 Spence, W. G., Chippewa Falls.  
 Schuerbel, J. H., Appleton.  
 Sedgewick, F. A., Clintonville.  
 \*Sykes, H. D., Milwaukee.  
 \*Sanner, W. E., Waukesha.  
 Spencer, C. A., Waupaca.  
 \*Sallade, W. A., Fond du Lac.  
 Soik, L. H., Berlin.  
 Stevens, J. C., Shawano.  
 Stilleke, Chas., Milwaukee.  
 Shutz, G. Y., Antigo.  
 Schmidt, W. B., Appleton.  
 Sylvester, A. F., Milwaukee.  
 Socksteder, E. W., Appleton.  
 Thrall, C. E., Rochester.  
 Trayser, W. A., New London.  
 Thieman, F. W., Sheboygan.  
 Tucker, Oscar, Ann Arbor.  
 Trainer, H. E., Green Bay.  
 Trayser, A., New London.  
 Thomas, J. L. B., Horicon.  
 Underwood, H., Milwaukee.  
 Walters, E. E., Janesville.  
 Ward, E. H., Milwaukee.  
 \*Washburne, R. J., Palmyra.  
 Wells, G. E., Milwaukee.  
 Wegner, H. J., Oshkosh.  
 Wardrobe, Fred, Waukesha.  
 Williams, Ed. E., DePere.  
 Worm, G. A., Racine.  
 Weiner, Wm., Appleton.  
 \*Yates, C. H., Janesville.

Total attendance as per register, 149; Ladies, 38.

\*Names marked by a star were accompanied with ladies.

# In Memoriam.

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H. R. DOANE,

Delavan, Wis., Died July, 1890, Aged 53 Years.

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H. H. BUTTON,

Milwaukee, Wis., Died 1890.

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J. R. COOLEY,

Hammond, Wis., Died 1890.

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## ROLL OF MEMBERS.

Members are requested to notify the Secretary of change of residence, death of members in their locality, or errors in the roll.

Allen, H. B.....	Richland Center.....	1880
Avery, Charles H.....	Madison.....	'80
Anneck, C.....	Milwaukee.....	'81
Alter, O. A.....	Manitowoc.....	'82
Arnold, R. E.....	Fairchild.....	'85
Arps, Chas.....	New Holstein.....	'86
Atwell, F. W., Dr.....	Fifield.....	'89
Brown, F. B.....	Oconomowoc.....	'80
Baker, J. P.....	Janesville.....	'80
Bauman, Geo.....	Oshkosh.....	'80
Bartlett, Geo. W.....	Albany.....	'81
Beverung, H. C.....	Milwaukee.....	'81
Barker, E. K.....	Milwaukee.....	'81
Barker, O. D.....	Milwaukee.....	'81
Buchan, Thomas G.....	Union Grove.....	'81
Briggs, George H.....	Delavan.....	'81
Baumbach, Charles A.....	Milwaukee.....	'81
Babcock, E. L.....	Milwaukee.....	'81
Bechmann, C. R.....	Fountain City.....	'82
Bechaud, A. R.....	Jefferson.....	'82
Bernhard, C. H.....	Madison.....	'82
Breed, George N.....	Chilton.....	'82
Bass, Henry.....	Oshkosh.....	'82
Brown, J. R.....	Berlin.....	'83
Benson, F. W.....	Lowell.....	'83
Beyschlag, Chas.....	La Crosse.....	'83
Bellerue, A. T.....	La Crosse.....	'83
Bailey, R.....	Waupaca.....	'83
Beule, Peter.....	Beaver Dam.....	'84
Beebe, E. W.....	Tomah.....	'84
Burns, J. W.....	Oakfield.....	'86
Burns, Thomas.....	Oakfield.....	'86
Bartell, Max.....	Milwaukee.....	'87
Brown, A.....	Milwaukee.....	'87
Bernhard, P. H.....	Hurley.....	'87
Boehme, C. A., Jr.....	Tomah.....	'87
Bender, Wm.....	Milwaukee.....	'87
Boclo, Hugo.....	Cedarburg.....	'88
Bergwald, E. A.....	Milwaukee.....	'88
Boetcher, Henry.....	Milwaukee.....	'88
Bassett, E. G.....	Berlin.....	'89
Blestren, H. M. G.....	Eau Claire.....	'89
Blackburn, A. F.....	Waldo.....	'90

Berg, Geo.	Appleton.	'90
Conrath, Adam	Milwaukee.	'80
Conradi, August.	Madison.	'89
Clarke, W. P.	Milton.	'80
Curtis, J. W.	Madison.	'80
Clark, John H.	Madison.	'80
Cheever, R. W.	Clinton.	'81
Christensen, L. A.	Baldwin.	'81
Crane, Edwin W.	Tomah.	'81
Cunradi, Robert.	Sauk City.	'82
Crouse, Fred M.	Chippewa Falls.	'82
Canfield, Dr. T. M.	Necedah.	'82
Charlesworth, F. M.	Ledyard.	'82
Cross, T. P.	Sun Prairie.	'84
Crow, Frank M.	Evansville.	'85
Coon, Dr. J. W.	Tomahawk.	'86
Calkins, C. A.	Tomah.	'87
Cohn, A. H.	Milwaukee.	'87
Clark, H. L.	Delavan.	'87
Cambier, Jacob.	Milwaukee.	'89
Campbell, A. A.	Durand.	'89
Collyer, B. B.	Clinton Junction.	'90
Dadd, John A.	Milwaukee.	'80
Drake, Harvey W.	Milwaukee.	'80
Drake, Henry T.	Milwaukee.	'80
Drake, John R.	Milwaukee.	'80
Detloff, H.	Chippewa Falls.	'80
Dunlap, Chesley L.	Waukesha.	'81
Dohmen, Fred.	Milwaukee.	'81
Dana, Jas. E.	Fond du Lac.	'82
Dexheimer, H. J.	Ft. Atkinson.	'82
Dexheimer, G. W.	Ft. Atkinson.	'82
Douty, C. S.	Omro.	'82
Dow, C. M.	Madison.	'85
Dohmen, W. F.	Milwaukee.	'85
Driver, Jos. P.	Darlington.	'85
Dames, A. A.	New Lisbon.	'86
Dorestan, Enno.	Milwaukee.	'87
Dietz, Emil.	Milwaukee.	'87
Davis, B. W.	Markesan.	'87
Dunlap, W. P.	Waukesha.	'88
Dohmen, Henry.	Milwaukee.	'88
Dieter, John.	Richland Center.	'89
Dale, Dr. Geo.	Iola.	'89
Evans, Enoch.	Cambria.	'80
Esau, Fred.	Milwaukee.	'80
Eldridge, W. M.	Janesville.	'80
Edwards, W. M.	Portage.	'80
Elbert, J. K.	Monroe.	'81
Eberle, H. T.	Watertown.	'81
Engsberg, Conrad.	Lake Mills.	'81
Englehard, G. P.	Chicago.	'82
Ellis, A. G.	Brooklyn.	'84
Eppinger, J. A.	La Crosse.	'85
Evans, Dr. J. M.	Evansville.	'86
Erdman, C. A.	Milwaukee.	'87

Kstberg, A. C.	Milwaukee	'87
Fenton, S. F.	Beloit	'80
Falk, O. N.	Stoughton	'80
Falk, Fred N.	Stoughton	'81
Froelich, J. A.	Oshkosh	'81
Ford, S. W. Jr.	Oconto	'82
Fisher, Wm.	Norwalk	'82
Fisher, H. A.	Baraboo	'84
Fisher, A. F.	Baraboo	'84
Foster, C. P.	Milwaukee	'84
Fitzgerald, J. B.	Ironton	'84
Fess, Henry	Milwaukee	'87
Favor, H. W.	Boscobel	'87
Faber, Chas. A.	Plymouth	'89
Gates, W. H.	Milton Junction	'80
Graham, John	Portage	'80
Griffith, P. A.	Oshkosh	'81
Geissler, Edward	Milwaukee	'81
Goes, Gustave	Milwaukee	'81
Goes, Wm.	Milwaukee	'81
Gerhardy, Theo.	Milwaukee	'81
Givens, Frank M.	Fond du Lac	'81
Griswold, E. W.	Racine	'82
Grant, D. C.	Rhineland	'83
Görder, Christian	La Crosse	'83
Gray, D. M.	Detroit, Michigan	'87
Griswold, D. C.	Lodi	'87
Giesler, Edw.	Milwaukee	'87
Griste, P. O.	East Troy	'88
Grimmer, F. E., Sr.	Mauston	'88
Geisse, C. F. W.	Fond du Lac	'88
Grifis, W. C.	Beaver Dam	'89
Gerber, J. J.	Milwaukee	'89
Helmstreet, E. B.	Janesville	'80
Hollister, A. H.	Madison	'80
Huber, J. C.	Fond du Lac	'80
Hammersley, W. H.	Geneva Lake	'80
Howard, Geo.	La Crosse	'80
Hunter, Murray M.	Milwaukee	'81
Hinricks, Henry	Manitowoc	'81
Hummel, H. D.	Milwaukee	'81
Hackendahl, H.	Milwaukee	'81
Hollister, E. H.	Kenosha	'81
Hawes, J. A.	Appleton	'82
Hirschbuehl, A.	Bay View	'83
Hinkson, Edgar E.	Poyette	'83
Hals, O. C.	La Crosse	'83
Hill, H. D.	Westfield	'83
Humphrey, A. J.	Waterloo	'84
Hageman, R. C.	Baraboo	'86
Hannon, F. J.	Fort Howard	'86
Heider, H. G.	Fond du Lac	'86
Hillmantel, L. G.	Milwaukee	'87
Heyerdahl, A. M.	Black River Falls	'87
Hoya, Wm. C.	Milwaukee	'87
Hayden, Albert	Shullsburg	'88



Hocking, W. J.	Florence	'88
Helmstreet, C. S.	Hudson	'89
Hurd, C. H.	Kenosha	'89
Hensel, Geo. H.	Milwaukee	'90
Isham, F. W.	Elkhorn	'83
Inman, E. C.	Clinton	'85
Johnson, F. D.	Menominee	'81
Jurgensohn, B. T.	Manawa	'90
Jerman, Thos.	Ramona, Cal.	'85
John, D. W.	Marinette	'85
Kent, Wm. F.	Fond du Lac	'81
Kienth, John	Milwaukee	'81
Kaas, von A.	Oshkosh	'82
Kirkby, W. R.	Racine	'82
Kremers, Edw.	Madison	'86
Kleve, A. E.	Escanaba, Mich.	'85
Koebnick, W. E.	Ripon	'86
Kuehnsted, O.	Appleton	'87
Kamps, J. H.	Appleton	'87
Krembs, Ernst	Milwaukee	'87
Kropp, Wm.	Milwaukee	'87
Kuehnell, G. F.	Milwaukee	'87
Kaiser, Wm. F.	Milwaukee	'89
Krause, C. H.	Portage	'89
Knorr, B. E.	Eau Claire	'90
Lange, L. A.	Chicago	'80
Lightner, J. A.	Randolph	'80
Ladwig, F. F.	Milwaukee	'81
Le Mieux, L. A.	Seymour	'81
Lightner, J. S.	Randolph	'81
Little, C. S.	Appleton	'82
Lien, Christian	La Crosse	'83
Lewis, L. V.	Sun Prairie	'84
Linquest, C. J.	Elo	'84
Lewis, Henry	Madison	'85
Lonquest, John	Cumberland	'86
Lilly, J. K.	Indianapolis	'86
Lyons, E. M.	Brodhead	'87
Leutsker, E. J.	Antigo	'87
Ladwig, Paul	Milwaukee	'87
Lueders, A. W.	Milwaukee	'87
Lochmes, Wm. T.	Milwaukee	'87
Luethe, A.	Milwaukee	'87
Lasche, A. J. M.	Chicago	'89
Morrison, James	New Lisbon	'80
Marlott, D. G.	Racine	'80
Mayers, Andrew A.	Madison	'81
Melsas, Ole B.	Stoughton	'81
Martin, Thos. L.	Wilton	'81
Mormon, Fred	Wausau	'81
Meibohm, H.	Milwaukee	'81
Meyer, Lewis	Milwaukee	'81
Meissner, Chas. A.	Milwaukee	'82
Masbaum, John	Crandon	'82
Mahlendorf, A. Jr.	Sheboygan	'82
Marden, Frank L.	Chicago	'82

Montgomery, W. F.	Appleton.	'82
Menges, A. F.	Madison.	'84
Morris, D. G.	Sharon.	'85
Mertes, Anton.	Appleton.	'86
Menkey, L. T.	Hudson.	'87
Mitchell, A. S.	Milwaukee.	'87
Meachem, John M.	Milwaukee.	'87
Mieding, A. E.	Milwaukee.	'87
Meissner, Paul E.	Milwaukee.	'88
Mann, John F.	Madison.	'88
Mathews, C. F.	Viola.	'89
Merrill, B. D.	Portage.	'89
Meyer, L. C.	Sheboygan.	'90
Maurer, Emil.	Arcadia.	'90
Natz, Chas. H.	Madison.	'80
Newton, F. M.	Sparta.	'83
Naber, F. D.	Shawano.	'86
O'Neill, H. L.	Milwaukee.	'80
O'Neill, C. H.	Milwaukee.	'81
Olsen, T.	Grantsburg.	'86
Prentice, F. F.	Janesville.	'80
Pardee, E. D.	Wausau.	'80
Pardee, A. A.	Madison.	'80
Prash, Martin G.	Burlington.	'81
Patton, Edwin B.	Waupun.	'81
Parks, Fred W.	Chicago.	'81
Patterson, John G.	Milwaukee.	'81
Pfeifer, Chas.	Plymouth.	'82
Pfeil, Anton.	Fond du Lac.	'82
Pulford, R. D.	Mineral Point.	'82
Palmer, W. G.	Janesville.	'82
Prasch, F. J.	Burlington.	'82
Poppe, H. B. B.	Waupaca.	'82
Palmer, W. P.	Sparta.	'83
Pierson, J. S.	Trempealeau.	'83
Pfueger, W. F.	Chicago.	'86
Post, L. D.	Weyauwega.	'87
Pittman, Frank.	Mineral Point.	'88
Playter, E. H.	Eau Claire.	'89
Purdy, E. S.	Portage.	'89
Pittman, M. D.	Boscobel.	'89
Popp, G. G.	Baraboo.	'89
Ritz, A. N.	Milwaukee.	'83
Rollman, Henry.	Chilton.	'80
Roblison, John.	Green Bay.	'80
Robinson, Richard T.	Racine.	'80
Robinson, F.	Kenosha.	'80
Rietz, F. V.	Milwaukee.	'81
Roberts, James.	Dodgeville.	'81
Rex, Henry.	Hustisford.	'82
Ranum, O. K.	Menomonie.	'82
Read, Frank D.	Chicago.	'83
Runckle, Lewis.	La Crosse.	'83
Ryall, E. C.	Augusta.	'84
Rostad, K. T.	Davis, Ill.	'84
Ryning, J. G. M.	La Crosse.	'84

Elester, Edw.....	Chippewa Falls.....	'85
Ruenzel, H. G.....	Milwaukee.....	'85
Reeve, John.....	Fond du Lac.....	'86
Ritmeler, Wm.....	Milwaukee.....	'87
Rex, Chas. H.....	Hustisford.....	'87
Rupp, L. P.....	Milwaukee.....	'87
Reinholdt, H. O.....	Milwaukee.....	'87
Reichel, H. C.....	Waukesha.....	'88
Raben, C. E.....	Racine.....	'90
Suits, C. G.....	Medford.....	'85
Sauerhering, R.....	Mayville.....	'80
Schranck, Henry C.....	Milwaukee.....	'80
Schorse, Otto.....	Milwaukee.....	'80
Salladi, W. A.....	Fond du Lac.....	'80
Sumner, Edwin.....	Madison.....	'80
Smith, C. A.....	Beloit.....	'80
Smith, E. R.....	Beloit.....	'80
Sykes, H. D.....	Milwaukee.....	'80
Spence, T. H.....	La Crosse.....	'80
Stearns, H. C.....	Janesville.....	'81
Sniteman, Charles C.....	Neillsville.....	'81
Schmitz, Victor A.....	Milwaukee.....	'81
Schmidt, J. F. W.....	Oshkosh.....	'81
Spence, W. G.....	Chippewa Falls.....	'81
Strothmeyer, C. H.....	Milwaukee.....	'81
Strothmeyer, H. L.....	Milwaukee.....	'81
Shafer, E. G.....	Minneapolis, Minn.....	'81
Schmidt, Edward.....	Milwaukee.....	'81
Sherwin, E. A.....	Wallace, Idaho.....	'81
Schallern, Ottmar.....	Ripon.....	'81
Sedgwick, F. A.....	Clintonville.....	'82
Stratton, C. J.....	Elkhorn.....	'82
Stevens, C. D.....	Janesville.....	'82
Stock, Emil F.....	Manitowoc.....	'82
Starks, Edgar.....	Amhurst.....	'83
Slater, John W.....	Berlin.....	'83
Stevens, W. B.....	Portage.....	'83
Sheldrump, A. F.....	Stoughton.....	'83
Swain, F. N.....	Madison.....	'84
Stearns, W. P.....	Chicago.....	'86
Sauerhering, Edward.....	Mayville.....	'86
Sorley, E. B.....	Weyauwega.....	'87
Sawyer, M. A.....	Boscobel.....	'87
Simonson, Dr. J.....	Pittsville.....	'87
Stillicke, C. A.....	Milwaukee.....	'87
Schultz, H. L.....	Milwaukee.....	'87
Schmidt, J. N.....	Rice Lake.....	'87
Stratton, W. J.....	Elkhorn.....	'88
Speigleberg, Emil.....	Lancaster.....	'88
Smith, F. O.....	Richland Center.....	'88
Stevens, Dr. J. V.....	Prairie du Sac.....	'89
Sanner, W. L.....	Waukesha.....	'90
Spencer, C. A.....	Waupaca.....	'90
Schulz, Geo. J.....	Antigo.....	'90
Trayser, Anthony.....	New London.....	'80
Thleman, F. W.....	Sheboygan Falls.....	'81

Trott, von August .....	Milwaukee.....	'81
Thiele, Otto A. ....	Milwaukee.....	'81
Townsend, A. J. ....	Wyocena.....	'83
Trowbridge, C. H. ....	Viroqua.....	'86
Tucker, Oscar.....	Ann Arbor, Mich.....	'87
Tomkewitz, J. W.....	Milwaukee.....	'87
Taylor, Wm. S.....	Milwaukee.....	'87
Turner, H. E.....	Green Bay.....	'90
Tarrant, I. H.....	Janesville.....	'90
Taylor, D. A.....	Chippewa Falls.....	'90
Volkman, Henry.....	Kingston.....	'86
Vivan, Fred.....	Mineral Point.....	'88
Voss, H. H.....	Madison.....	'89
White, C. M.....	Chicago.....	'80
White, I. M.....	Waukesha.....	'80
Wright, G. W.....	Plattville.....	'80
Window, A. J.....	Bloomington.....	'80
Woodward, O. L.....	Clinton Junction.....	'80
Wolfrum, Fred.....	West Bend.....	'81
Wright, W. Edward.....	Milwaukee.....	'81
Widule, Christian.....	Milwaukee.....	'81
Weise, R.....	Milwaukee.....	'81
Williams, O.....	Janesville.....	'81
Wardrobe, Fred.....	Waukesha.....	'81
Wahl, Ernest H.....	Milwaukee.....	'81
Wheeler, H. J.....	Depere.....	'82
Wright, E. M.....	Prairie du Chien.....	'82
Waller, M. J.....	Winneconne.....	'82
Wilms, B. A.....	Colby.....	'82
Wooster, A. L.....	Osseo.....	'82
Wood, Walter L.....	Grand Rapids.....	'82
Woodnorth, J. H.....	Waupaca.....	'82
Williams, W. E.....	Antigo.....	'84
Woolhizer, O. T.....	South Wayne.....	'84
Washburn, R. J.....	Palmyra.....	'85
Whitman, A. C.....	Hurley.....	'87
Wright, S. T.....	Milwaukee.....	'87
Wallschlaiger, P. C. H.....	Milwaukee.....	'87
Wilson, R. A.....	Black River Falls.....	'87
Ward, Jennie R.....	Necedah.....	'87
Willson, B. C.....	Edgerton.....	'87
Williams, Wm. E.....	Dodgeville.....	'88
Woodward, O. H.....	Kenosha.....	'88
Wright, E. E.....	Prairie du Chien.....	'89
Williams, B. C.....	Waukesha.....	'90
Watson, Frank.....	Chippewa Falls.....	'90
Yates, C. F.....	Janesville.....	'81
Young, L. M.....	Cadott.....	'87
Zaegle, M. R.....	Sheboygan.....	'85
Zimmerman, R. E.....	Nellsville.....	'89

## HONORARY MEMBERS.

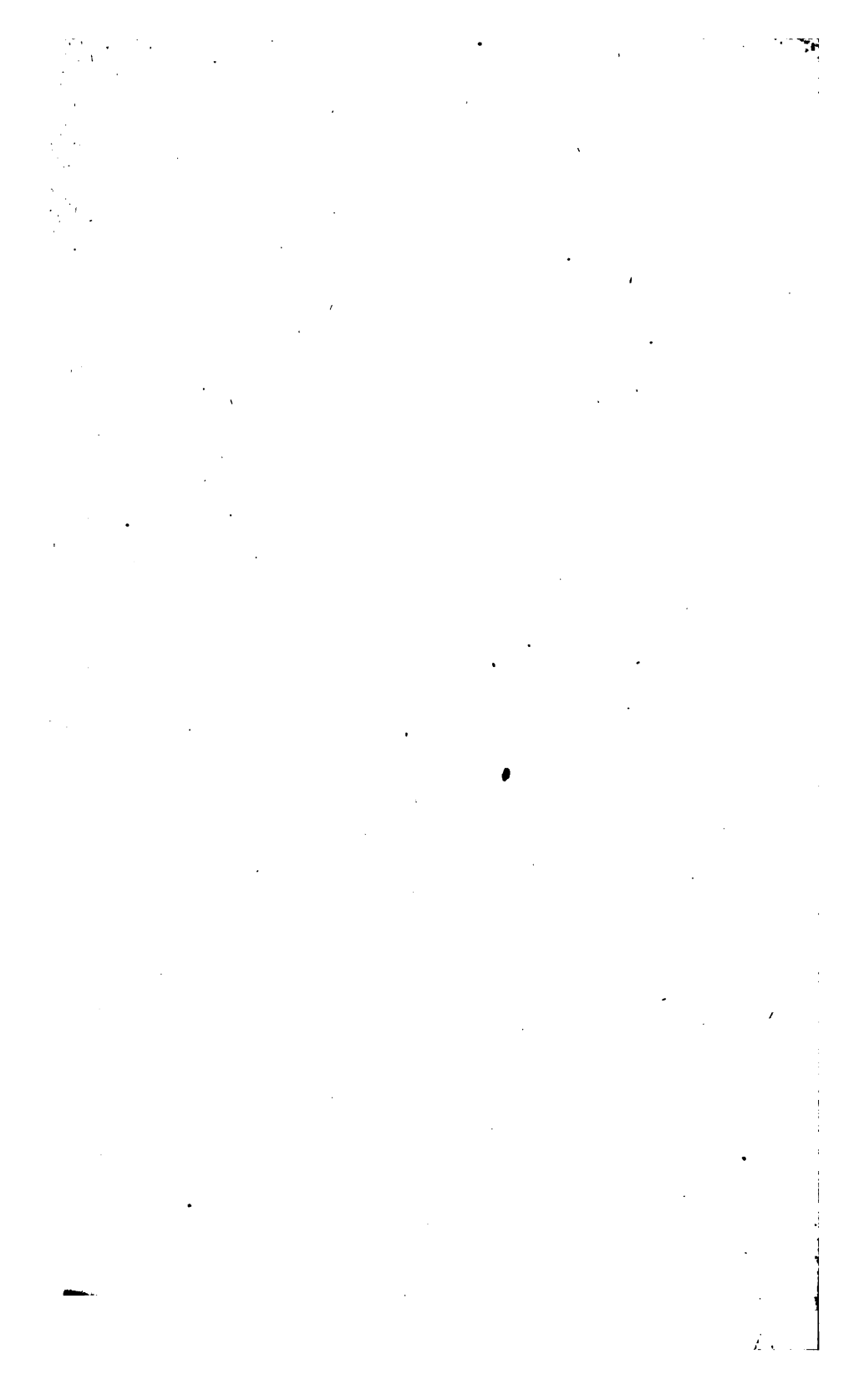
Prof. J. M. Maisch.....	Philadelphia, Pa.....	'82
C. M. Smith, M. D.....	Evansville.....	'82
Prof. F. B. Power.....	Madison.....	'84
Dr. Frederick Hoffmann.....	New York, N. Y.....	'90

DIED SINCE MEETING OF 1888.

Button, H. H.....	Milwaukee .....	'80
Doane, H. R.....	Delavan.....	'85
Cooley, J. R.....	Hammond .....	'82

1890—DROPPED FOR NON-PAYMENT OF DUES.

Andrus, S. G., Deerfield.	Hecht, David, Milwaukee.
Burnside, E. J., Ripon.	Kropf, O. A., Milwaukee.
Brayton, J. E., Ripon.	Kunze, W. E., Delafield.
Bonneville, A. E., Ashland.	Love, P. J., Sturgeon Bay.
Cleggett, F. B., Oshkosh.	Nanscausen, C. V., Ft. Howard.
Ditter, J. A., Fond du Lac.	Pflugradt, C., Hilbert.
Enckhausen, H., Tomah.	Quinn, Chas., Grand Rapids.
Emerson, C. A., Beloit.	



## MEMBERS OF THE BOARD.

A. CONRATH, MILWAUKEE,	- - - - -	Term expires 1891.
E. B. HEIMSTREET, JANESVILLE,	- - - - -	Term expires 1892.
C. R. BECHMANN, FOUNTAIN CITY,	- - - - -	Term expires 1893.
R. D. PULFORD, MINERAL POINT,	- - - - -	Term expires 1894.
F. ROBINSON, KENOSHA,	- - - - -	Term expires 1895.

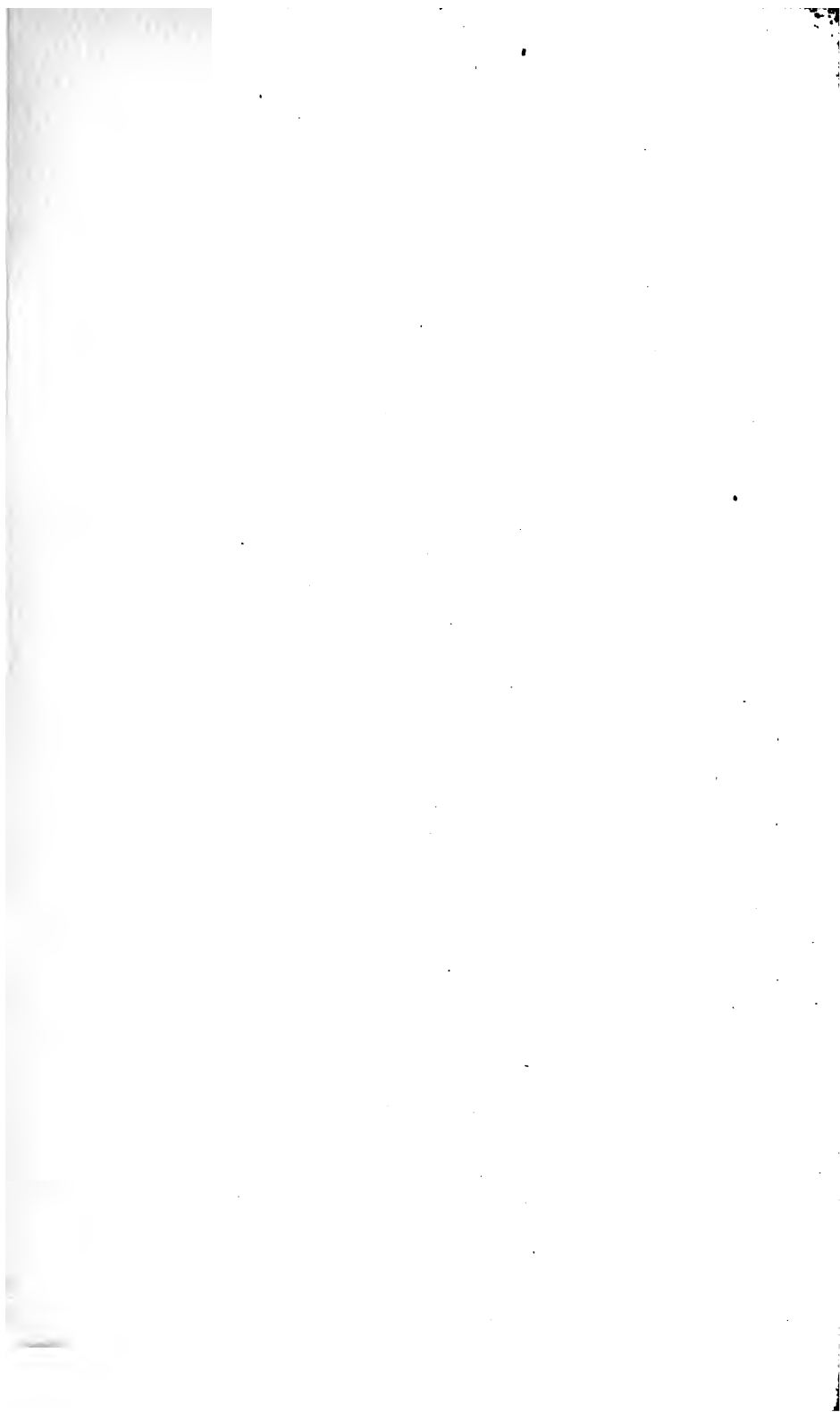
## OFFICERS.

### PRESIDENT.

ADAM CONRATH,	- - - - -	MILWAUKEE.
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### SECRETARY AND TREASURER.

E. B. HEIMSTREET,	- - - - -	JANESVILLE.
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NINTH ANNUAL REPORT  
OF THE  
WISCONSIN BOARD OF PHARMACY

AUGUST, 1890.

*To the Officers and Members of the Wisconsin Pharmaceutical Association:*

GENTLEMEN:—I have the honor to submit to you this, the ninth annual report of the Wisconsin Board of Pharmacy:

PROCEEDINGS.

The first meeting of the year was held at Portage, August 15, 16 and 17, 1889; three days' meeting.

Annual report of Secretary and Treasurer was read, showing the work done the past year. Cash balance on hand \$750.76. A number of complaints were made, and the Secretary directed to attend to them. Twenty-seven applied for examination. One received certificate as Graduate, four as Licentiate, eleven as Assistant, eleven rejected.

The second meeting was held at Milwaukee, November 12, 13, 14 and 15, 1889; four days' session. Thirty-three persons applied for examination, of which number three were granted Licentiate, three Graduate and thirteen Assistant certificates, and fourteen rejected.

January 14, 15, 16, 1890.—Three days' session at Milwaukee. Twenty-five applied for and took the examination. Four Licentiate and nine Assistant certificates were granted. Twelve papers rejected.

Madison, March 25, 26, 27, 28, 1890.—Four days' session. Tuesday, the 25th, was spent in examination of the Pharmacy class. Wednesday the examination was held, fifty-five being present, resulting as follows: Three Graduates, eight Licentiate and thirty

Assistant certificates granted, while fourteen failed to come to required standing and were rejected.

Adam Conrath, of Milwaukee, was elected President, and E. B. Heimstreet, of Janesville, Secretary and Treasurer for the ensuing year.

F. Robinson, of Kenosha, presented papers of his appointment as member of the Board for ensuing five years.

The bond of Treasurer was fixed at two thousand dollars, and salary of Secretary and Treasurer at four hundred dollars, this to include office rent and clerk hire.

The required standard is the same as in former years. Necessary to obtain Licentiate or Graduate certificate, 60 per cent. on each paper, and 75 per cent. general average. For Assistant, 45 per cent. on each paper, and 60 per cent. general average. Five years' experience required for Licentiate, four years for Graduate and two years for Assistant. No diplomas of any college recognized. Licentiates by examination from other states granted registration without examination when proper papers are filed accompanied by a certificate from secretary of the board where examination was held stating their percentage of standing.

Messrs. Fethers, Jeffris & Fifield, of Janesville, were appointed as attorneys of the Board.

The next meeting was held at Eau Claire, June 3, 4, 5, 1890.—Three days' session. The Secretary was directed to visit towns in different parts of the state and ascertain if reports were correct in regard to violation of Pharmacy law, and to commence proceedings in any case of same.

Eighteen applied for examination. One Graduate, three Licentiate and seven Assistant certificates were granted. Seven were rejected.

#### TOTAL.

Five meetings, fourteen days' session. One hundred and fifty-eight applications. Eight Graduates, twenty-two Licentiates, seventy Assistant certificates granted, and fifty-eight rejected.

The work of the Board since 1882 is as follows:

	1882	1883	1884	1885	1886	1887	1888	1889	1890	Total.
Number examined.....	22	54	88	92	135	157	154	123	158	983
Graduate, Lic. Certificate.....	12	37	50	51	54	72	29	28	30	363
Assistants' Certificates.....	2	2	14	12	14	18	74	62	70	268
Number rejected.....	8	15	24	29	67	67	51	33	58	352

### INTERCHANGE OF CERTIFICATES.

That the different State Boards of Pharmacy should provide some means for a satisfactory recognition of each others' certificates is one of the questions of the day. A large amount of correspondence has been done in regard to it, but no definite action taken, each state board waiting for the other to take the lead. At the meeting of the Wisconsin Board of Pharmacy, held at Milwaukee, January 8, 1889, E. B. Heimstreet offered the following resolution, which was adopted by the Board:

The Wisconsin State Board of Pharmacy will grant full certificates to all Licentiates of other states whose examinations correspond with that of Wisconsin, and the applicant gives proof that he has had five years' practical experience and passed a successful examination.

The Secretary of the Wisconsin Board will register and issue certificates to such applicants when above proof is furnished and a fee of \$2.00 is paid for registration. An assistant's certificate is granted to those having less than five years' experience.

This proposition is limited to Licentiates by examination only. The further stipulation that the "examination in other states *must correspond with those of Wisconsin*," is sufficiently broad to protect the Board. Wisconsin having taken the lead, Michigan, at its spring meeting, adopted similar resolutions, and Wisconsin certificates are now received in Minnesota, Michigan, South Carolina, Virginia and New York. Its working in Wisconsin since January, 1889, has been as follows: Seventeen Licentiates granted from Minnesota, thirteen from Illinois, North Carolina and Michigan each two, Maine, Iowa, Kentucky, South Dakota each one, making a total of thirty-eight. Seventeen certificates have been signed by the Secretary of the Wisconsin Board to persons wishing to remove to other states. The applications received by the Board so far show a high rate of standing and required number of years' experience. It is expected that some action will be taken at the meeting of the A. P. A. next month and it is probably but a question of time when the certificate of a licentiate by examination will be accepted in any state.

### REGISTRATION.

The total number of persons who have been registered since April, 1882, is as follows: Graduate and Licentiate, fourteen hundred and sixty-three (1463); Assistants, four hundred and thirteen (413). Minor certificates granted prior to 1887, at which time the law was amended and minor registration dropped, ninety-one (91). Of this number the following are in force August 1, 1890: Grad-

uate and Licentiate, 1,090; Assistant, 221; Minor, 48. The balance have left the state, died or gone out of business.

The requirements for registration in this state are: For an Assistant certificate, two years' practical experience in a drug store where prescriptions are compounded, and pass examination at some regular meeting of the Board. For Graduate certificate, four years' experience in a drug store where physicians' prescriptions are compounded, presentation of Diploma from some recognized College of Pharmacy, and pass the regular examination before the Board. For Licentiate, five years' practical experience in a drug store and pass the required examination. For Licentiate by registration, application made out in regular form from some town or city in Wisconsin, accompanied with certificate of Secretary of Board, giving date of examination and standing of applicant.

In examinations, if standing is not sufficient for Licentiate, Assistants' certificate will be issued when requested, provided the standing is over sixty per cent.

Physician's diplomas are not recognized, or the diplomas of any college of pharmacy.

Duplicate certificates will be issued in case of loss of original, on receipt of affidavit of such loss accompanied with fifty cents.

### PROSECUTIONS.

#### REPORT OF CASES SINCE AUGUST, 1889.

October 2, 1889.—State vs. A. F. Sheldrup, of Stoughton, Dane county. No registered person in charge of store. Defendant fined fifty dollars and costs. Paid. Case before Judge Keyes, of Madison.

November, 1889.—State vs. F. Heineman, of Appleton, Outagamie county. No registered person in charge of store. Before Judge Meyers, Circuit Court, being carried up from lower court. Defendant fined fifty dollars and costs. This case has been appealed to the Supreme Court, and will be tried at the November term.

Four cases are now in court, but time of trial has not been set.

There is no doubt but what the Pharmacy law is violated in Wisconsin as well as other states.

Complaints are sent in every week to the Board reporting some person, with request that they be prosecuted, but in most every case no proof is sent and the letters end by requesting that no names be mentioned. As a rule the Board can be depended on to carry out their part, but the druggists do not aid them by reporting violations of the law as they should. The Board cannot

employ a man to travel over the state for the purpose of hunting violators of the law, but where a case of violation is reported, we do not know of a single instance where the report was not investigated, resulting in prosecution or a satisfactory reason given for not doing so.

Virginia drug clerks have taken an advanced step in this direction by organizing a State Drug Clerks' Association for the primary purpose of reporting to the Board all violations. Why would not this work well in Wisconsin? A number of cases have been settled the last year without applying to the courts, the Board thinking it best for all parties to take such action, viz: Where complaint has been made and the parties complying with the law by securing registered help.

The Board would call your attention to the following: The law requires your certificate to be prominently displayed in your place of business.

This display of certificates serves several purposes. It furnishes the purchaser with evidence that the person of whom he obtains his drug supplies is entitled by law to compound and dispense drugs. It is also a great aid to the State Board in detecting those doing business not according to the laws of the state, as the non-display of certificate may be taken as evidence that the party conducting the business has none to display, as certainly no one need be ashamed to show the public that they have complied with the requirements of our pharmacy act. The Board is willing, in fact anxious, to enforce the law to its fullest extent, yet they find it no easy matter to do so if but few extend a helping hand and the means at their command do not justify their traveling from place to place in order to ferret out those who are trying to evade the law. The secretary of the Board has been directed to commence prosecution in all cases where certificates are not displayed in pharmacies. (See section X, Pharmacy law.)

The qualifications for registration of pharmacists in the various states are as follows: Examination is imperative in Massachusetts, Nebraska, Ohio and Pennsylvania; in Florida physicians are excepted; graduates in pharmacy, from colleges requiring four years' experience, are entitled to registration without examination in Alabama, Idaho, Illinois, Missouri, New Jersey, West Virginia and in the city of Baltimore; graduates in pharmacy, without reference to experience, are entitled to registration without examination in Connecticut, Dakota, Kansas, Kentucky, Minnesota, North Carolina, Rhode Island, South Carolina and Virginia; in Colorado graduates are required to have had but two years' practical experience; physicians are permitted to keep open shop without examination in Alabama, Florida,

Illinois, Minnesota, Missouri, North Carolina, South Carolina and Virginia, and in Pennsylvania provided they have had three years' practice since receiving their diplomas; in New Jersey four years' experience in dispensing is required of doctors in medicine; physicians are especially permitted to dispense their own prescriptions or to supply their patients with medicines in Connecticut, Dakota, Idaho, Iowa, Massachusetts, Michigan, New Hampshire, Ohio, Pennsylvania, Rhode Island, West Virginia and Wisconsin.

The state boards of pharmacy of Colorado, Connecticut, Dakota, Idaho, Michigan, Minnesota, North Carolina, Virginia and Wisconsin are empowered to recognize the licentiates of such other boards as they see fit. It appears to have been intended to grant the same power to the Illinois board, but the law is rather ambiguous on that head. New York has three local acts and one covering the remainder of the state. The general state law, from the operation of which the counties of New York, Kings and Erie are excepted, permits registration of graduates in pharmacy of colleges within the state without examination, and compels the board to recognize the licentiates of all other boards in the state of New York. It is not empowered to recognize certificates from other states.

Physicians are permitted to supply their patients with such articles as they see fit. In the city and county of New York, graduates in pharmacy having had four years' experience, and graduates in medicines, are entitled to registration without examination. This is not to be so construed as to interfere with physicians not keeping open shop. In Kings county, graduates in pharmacy and in medicine having had four years' practical experience are entitled to registration without examination, and the board of pharmacy is empowered to recognize the licentiates of such other boards as they see fit.

In Erie County graduates in pharmacy from legally constituted colleges of pharmacy of the state, and such others as may be recognized by the board, who have had four years' practical experience, are entitled to registration without examination. This board is permitted to recognize the licentiates of other boards of pharmacy. Every board of the state is obliged to recognize the certificates of all other boards in the state.

Over three thousand letters have been written from the Secretary's office during the past year in answer to questions and complaints that have been sent in.

The Secretary of the Board will continue to keep a record of clerks and proprietors. Any person wishing a registered clerk, or clerk wishing position, by applying to the Secretary will have

their name placed on the list for thirty days, and a list sent them. No attention will be paid to any letter unless stamp is enclosed for return postage. This list is free to all registered pharmacists of Wisconsin. To others a fee of fifty cents will be charged.

Meetings for examination of candidates will be held as follows: Milwaukee, Wednesday, Nov. 12, 1890; Milwaukee, Wednesday, Jan. 14, 1891; Madison, Wednesday, March 25, 1891.

The place of meeting can be ascertained by applying at any of the hotels at the time. as notice will be left at all of them. Applications must be filed at least five days before the meeting. In case they are not so filed, the applicant must wait until the class has been started to work, and will lose one hour's time.

The examination is both written and oral, commencing at 9:00 a. m. sharp, and continues from 9:00 to 12:30 p. m. and from 2:00 p. m. until finished.

No sample of question paper are sent to any one, but are published once a year in the proceedings. In writing for application blanks state whether Licentiate or Assistant is wanted. Record of standing will not be sent out except on application of secretary of other state boards.

The Wisconsin Board does not recognize the diplomas of any college of pharmacy, and the Board has no power to grant any permit or certificate without examination, except to Licentiates of other states whose examination corresponds with that of Wisconsin, and the applicant gives proof that he has had five years' practical experience, and has passed in said state a successful examination. The Secretary of the Wisconsin Board will register and issue certificates to such applicants when above proof is furnished and a fee of two dollars is paid for registration. An Assistant's certificate is granted to those having less than five years' experience and passed such examination. The application must be made out from some town or city in Wisconsin, and must be accompanied with statement from Secretary of the Board where the applicant passed examination, giving his standing at such examination.

Persons passing examination will receive their certificates the next month.

It may not occur to registered pharmacists the amount of time it takes in looking up the records of a registered pharmacist without having the number of his certificate, as well as the difficulty sometimes in identifying his name without his number. It is impossible to keep a correct alphabetical list of names owing to the constant change, some names retiring and new ones being added. When we have the number of a certificate we can turn to the records in a moment on the numerical list. Having frequent-

ly made the request heretofore, we again earnestly request all registered pharmacists, when corresponding or desiring information from this office, to give the number of their certificates with their names.

Report of receipts and expenses of the Board for the year ending August, 1890:

## RECEIPTS.

Cash on hand August 18th, 1889 .....	\$750.76
Received for renewals ..	\$1,187.50
Examination 80 Lic'tes and Graduates..	150.00
Examination 69 Assistants.....	345.00
Registered 1 Assistant.....	2.00
Registered 28 Licentiates .....	56.00
Duplicate certificates.....	4.50
Prosecution witness fee.....	2.95
Clerk fee.....	2.00
	<hr/>
	\$1,749.95
Total.....	<hr/>
	\$2,500.71

## EXPENSES.

Meetings.....	\$849.30
Postage .....	144.97
Prosecutions.....	137.92
Books and stationery .....	106.84
Salary of Secretary 1 year....	400.00
Printing Annual Report .....	46.90
Advertising....	10.10
Exchange.....	4.25
Telegrams .....	.25
Insurance.....	2.20
Express.....	.30
Fixing desk.....	4.50
Traveling expense, Madison .....	6.00
Miscellaneous expenses.....	1.45
	<hr/>
Total expenses for the year ..	\$1,714.98
Leaving cash on hand this date...	<hr/>
	\$785.73

Office furniture, etc., on hand August 10, 1890:

One office desk.....	\$15.00
Stamps and postals.....	16.20
Seal, Board .....	3.09
Seal, Notary Public .....	4.00
Printed matter and stationery.....	15.00
Blank certificates.....	4.50



Rolls for same.....	8.00
Caligraph .....	55.00
Table .....	2 00
Ink stand, pens, etc .....	3.00
Total .....	\$125.70



*Adam Corrado*

President.

*Chas. P. Bechman*

*Chas. D. Tupper*

*J. Robinson*

*E. B. Heinstreet*

Secretary.

# RECEIPTS.

	1882	1883	1884	1885	1886	1887	1888	1889	1890
Pharmacists by Registration.....	\$1,800.00	\$36.00	\$8.00	.....	\$6.00	\$2.00	.....	.....	\$58.00
Licentiate by Examination.....	65.00	185.00	250.00	.....	270.00	300.00	.....	.....	150.00
Minors by Registration.....	14.00	18.00	14.00	22.00	.....	.....	.....	.....	.....
Minors by Examination.....	5.00	10.00	70.00	60.00	75.00	30.00	.....	.....	345.00
Assistants by Registration.....	188.00	3.00	.....	.....	.....	55.00	375.00	310.00	.....
Graduates by Examination.....	.....	20.00	28.00	32.00	40.00	28.00	.....	62.00	.....
Duplicate Certificates.....	.....	1.50	2.00	8.00	3.50	9.00	5.00	7.00	4.80
Renewals.....	.....	942.50	1,020.50	1,035.50	1,045.00	1,108.00	1,161.00	1,177.00	1,187.50
Fines.....	.....	.....	.....	.....	100.00	50.00	37.80	17.78	2.85
Envelopes.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clerk's Register.....	.....	.....	.....	1.10	1.50	7.00	8.90	.....	2.00
Totals.....	\$2,132.00	\$1,216.00	\$1,302.50	\$1,438.00	\$1,541.00	\$1,650.00	\$1,748.70	\$1,718.78	\$1,749.95

# EXPENSE.

	1882	1883	1884	1885	1886	1887	1888	1889	1890
Advertising.....	\$6.30	\$22.00	\$28.00	\$26.45	\$12.75	\$31.93	.....	.....	\$10.10
Exchange and Express.....	9.10	4.90	7.46	7.36	4.65	5.30	.....	.....	5.06
Seals.....	15.17	.....	.....	4.50	.....	.....	.....	.....	.....
Desk.....	30.00	.....	.....	.....	.....	.....	.....	.....	.....
Books and Stationery.....	84.62	57.53	86.35	63.75	70.97	90.22	.....	.....	4.50
Stamps and Postals.....	183.91	68.95	88.22	74.08	88.24	107.54	.....	.....	106.84
Expense of Secretary.....	6.55	23.10	5.75	4.75	.....	.....	98.45	102.46	144.97
Salary of Secretary.....	150.00	300.00	300.00	300.00	350.00	400.00	400.00	400.00	400.00
Certificates.....	214.08	22.11	.....	10.19	18.00	.....	15.18	.....	.....
Meetings.....	623.96	833.49	679.62	863.20	816.95	890.23	943.98	776.08	849.30
Printing Annual Report.....	.....	33.80	27.84	.....	30.00	61.00	50.10	.....	40.90
Telegrams.....	.....	1.50	.....	.....	.....	1.95	.....	.....	.....
Clerk Hire.....	.....	.....	.....	50.00	.....	.....	.....	.....	.....
Calligraph.....	.....	.....	.....	80.45	3.75	.....	.....	78.95	137.92
Prosecutions.....	.....	.....	.....	16.00	157.10	138.15	250.43	5.10	1.45
Miscellaneous Expense.....	.....	2.38	7.44	10.20	19.44	5.90	10.80	2.20	.....
Insurance.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Delegates to National Board.....	.....	.....	.....	.....	.....	40.50	.....	.....	.....
Totals.....	\$1,323.57	\$1,308.26	\$1,220.08	\$1,502.96	\$1,572.85	\$1,708.32	\$1,847.04	\$1,481.17	\$1,714.98

## WISCONSIN STATE BOARD OF PHARMACY.

## EXAMINATION IN PHARMACY.

*Appleton, August 15, 1890.*..... *Candidates.*

Candidates should be particular to answer fully each question in the order named, being careful not to omit answering the several queries comprised in each numbered question. Omitting to answer any part of a question will detract from the average.

## PHARMACY.

1. How many grains in 4 troy ounces, 3 avordupois ounces, 8 grams?
2. Define Percolation, Maceration.
3. How is the specific gravity of Liquids and Solids determined?
4. What is an Infusion; a Decoction; a Cerate; an Ointment? Name one of each.
5. Give official name and process for preparing the following: Fowler's Solution; Solution of Chloride of Iron; Compound Syrup of Squill.
6. How are Resins extracted from drugs, and how are Oleo-Resins made?
7. Opium: Name the preparations thereof and state their dose.
8. From what is Lanoline prepared and what are its advantages?
9. What proportion of Quinine is present in and what is the degree of solubility of Citrate of Iron and Quinine?
10. State the difference between Emulsification and Saponification.

## MATERIA MEDICA AND BOTANY.

11. Cantharides: How are they collected? Give principal constituents and official preparations.
12. What is Nux Vomica? State its Alkaloids and medical properties.
13. Buchu: Give varieties, principal constituents, medical properties and dose.
14. Castor Oil: Give botanical name of plant yielding the same. How is it obtained?
15. What is Myrrha? Give name and habitat of plant yielding the same.
16. Mention the Varieties of Ginger in general use. With what is powdered ginger usually adulterated?
17. Nutgalls: What is it? Give habitat and principal constituent.
18. What are the principal differences between Fixed and Volatile Oils, physically and chemically?

19. What are Glucosides? Name five Alkaloids and the source from which each is obtained.

20. Name: *a*, The green coloring matter of plants; *b*, The parts of a perfect flower; *c*, A root, rhizome, tuber and bulb used medicinally.

#### CHEMISTRY AND TOXICOLOGY.

21. What is an Element, Atom, Molecule, and what does the term quantivalence signify?

22. Give atomic weight of Bromine and Potassium. How much of each is required to make one ounce troy of Bromide of Potassium?

23. How is Sulphureted Hydrogen prepared? State its properties.

24. Mercury: Symbol, Atomic, Weight. How is it found in nature? Name three pharmaceutical preparations containing mercury.

25. What is Ferrum Oxidum Hydratum, and how is it prepared?

26. What is the difference between Carbonate and Bi-carbonate of Sodium? How is the latter prepared?

27. Give the chemical formulæ for Acetic Acid, Ammonia, Corrosive Sublimate.

28. Chloral Hydrate: How is it obtained? Give its dose.

29. Alcohol: Give outline for its manufacture.

30. Name the antidotes for Aconite, Strychnine, Nitrate of Silver, Oxalic Acid.

#### SAMPLES PRESENTED FOR IDENTIFICATION.

- |                                |                       |
|--------------------------------|-----------------------|
| 1. Tr. Gentianæ Composita.     | 16. Magnesii Sulphas. |
| 2. Extractum Buchu Fluidum.    | 17. Potassii Chloras. |
| 3. Tinctura Opii.              | 18. Sodii Bicarbonas. |
| 4. Syrupus Pruni Virginianæ.   | 19. Potassii Iodidum. |
| 5. Liquor Potassii Arsenitis.  | 20. Ferri Citras.     |
| 6. Aqua Cinnamoni.             | 21. Oleum Ricini.     |
| 7. Tr. Cardamomi.              | 22. Oleum Sassafras.  |
| 8. Pulvis Ipecacuanhæ et opii. | 23. Coriandrum.       |
| 9. Unguentum Hydrargyri.       | 24. Buchu.            |
| 10. Linimentum Saponis.        | 25. Guaiaci Resina.   |
| 11. Potassii Nitras.           | 26. Sassafras.        |
| 12. Potassii Bitartras.        | 27. Valeriana.        |
| 13. Potassii Ferrocyanidum.    | 28. Carthamus.        |
| 14. Potassii Permanganas.      | 29. Ergota.           |
| 15. Acidum Salicylicum.        | 30. Feniculum.        |

# List of Registered Pharmacists in the State of Wisconsin

AND NUMBER OF CERTIFICATES, AUGUST, 1890.

NOTE. G—Graduate; R—Registered; L—Licentiate; M—Minor; A—Assistant.

Pharmacists are requested to report any errors or omissions in the list, and to report any change in their address. If you know of any one who is in the drug business, proprietor or clerk, whose name is not on this list, please report same to the Secretary of the Board.

**ABLEMAN—Sauk Co.**  
786 Fey, Adam.....R  
787 Goedecke, Louis.....R

**AHNAFEE—Kewaunee Co.**  
38 Doyen, Silas L.....R  
1424 Schroeder, Chas. M.....L  
1471 Dudley, James.....L

**ALBION—Dane Co.**  
827 Collins, T. B.....R

**ALMA—Buffalo Co.**  
419 Hunner, Louis P.....R  
1221 Syverson, G. F.....G  
1131 Graurud, Ole.....L

**ALMA CENTER—Jackson Co.**  
69 Bates, R. J.....M

**ALBANY—Green Co.**  
64 Bartlett, Geo. W.....R

**ALTOONA—Eau Claire Co.**  
166 Cross, Isaac.....R

**AMHERST—Portage Co.**  
195 Starks, Edgar.....R  
256 Guernsey, A. H.....R

**AMERY—Polk Co.**  
1425 Larrabee, Bert H.....L

**ANTIGO—Langlade Co.**  
998 Schutz, Geo. J.....R  
1431 Baum, Harry C.....L  
1462 Bancroft, C. F.....G

**APPLETON—Outagamie Co.**  
87 Cook, J. H.....R  
571 Montgomery, W. F.....R  
610 Kuehnstedt, Otto.....R  
681 Foster, Henry A.....R  
730 Kamps, J. H.....L  
756 Hawes, J. A.....R  
757 Little, C. S.....R  
771 Berg, Geo. W.....R  
822 Greulich, Jos.....R  
1329 Heimann, Herman.....G

1338 Cook, Harry W.....L  
233 Younger, Otto F.....A  
414 Sacksteder, Ed. W.....A  
418 Weimar, William.....A

**ARCADIA—Trempealeau Co.**  
1099 Maurer, Emil.....L

**ARKANSAW—Peplin Co.**  
67 Smith, John V.....M

**ARENA—Iowa Co.**  
196 Jones, Wm. H.....R

**ARGYLE—La Fayette Co.**  
506 Hansen, C. A.....R

**ASHLAND—Ashland Co.**  
452 Gillie, Herman G.....R  
606 Wilson, Frank S.....R  
842 Weed, H. D.....R  
950 Henry, Sam F.....L  
996 Warner, Louis A.....L  
1054 French, C. E.....L  
1286 Schreuder, L. S.....L  
1345 Warner, A. F.....L  
1473 Park, Wm. A.....L  
44 Bonneville, A. E.....M  
180 Moore, Chas. M.....A  
370 Crabb, Chas. J.....A  
399 Woodhead, Joseph V.....A

**AUGUSTA—Eau Claire Co.**  
780 Rundlitt, J. R.....R  
1315 Frederick, H. H. F.....G

**BARABOO—Sauk Co.**  
200 Donovan, J. B.....R  
291 Whitman, Jos. H.....R  
292 Whitman, Chas. W.....R  
293 Whitman, Frank.....R  
383 Fisher, A. F.....R  
1046 Fisher, Herman A.....L  
1108 Kock, A. C.....L  
1193 Fisher, Ernest A.....L  
1285 Walker, Fred G.....L

**BANGOR—La Crosse Co.**  
213 Evans, R. R.....R

<b>BARRON—Barron Co.</b>		524 Cole, J. W. .... R
744 Brandt, W. H. .... R		138 Bryant, E. P. .... R
882 Hanson, J. H. .... R		1077 Brainerd, L. E. .... L
<b>BAYFIELD—Bayfield Co.</b>		<b>BLANCHARDVILLE—La Fayette County.</b>
222 Tate, Andrew. .... R		334 McKellar, Archibald ..... A
<b>BAYVIEW—Milwaukee Co.</b>		BLUE MOUND—Dane Co.
142 Hirschbuehl, Anton. .... R		206 Bancroft, H. V. .... A
851 Platzer, Anna. .... R		BLOOM CITY—Richland Co.
97 Brehm, Carl. .... A		662 Shambaugh, Adam ..... R
<b>BALDWIN—St. Croix Co.</b>		BOAZ—Richland Co.
360 Christensen, L. A. .... R		79 Garner, E. S. .... M
361 Haarlow, W. .... R		BOYD—Chippewa Co.
370 Saugestad, O. A. .... R		44 Taylor, B. E. .... R
<b>BARNEVELD—Iowa Co.</b>		BOSCOBEL—Grant Co.
87 Roach, R. J. .... M		28 Favor, Hiram W. .... R
<b>BEAVER DAM—Dodge Co.</b>		29 Sawyer, M. A. .... R
7 Beale, Peter. .... R		197 Uphome, Christopher. .... E
15 Griffith, W. C. .... L		198 Pittman, Matt. B. .... R
1073 Sears, H. B. .... L		30 Pittman, Wm. H. .... A
1149 Congdon, Geo. C. .... G		402 Kradwell, Gus. V. .... A
1277 Zimmerman, A. A. .... L		<b>BRANDON—Fond du Lac Co.</b>
234 Clark, Horace L. .... A		301 Turner, James. .... R
290 Chandler, W. D. .... A		400 Gee, Jas. E. .... R
<b>BELMONT—La Fayette Co.</b>		1171 Wardrobe, W. G. .... L
829 Minor, Orrin E. .... R		<b>BROOKLYN—Green Co.</b>
864 Garden, Wm. A. .... E		188 Ellis, A. G. .... R
1001 Brown, R. W. .... R		<b>BRODHEAD—Green Co.</b>
<b>BELOIT—Rock Co.</b>		203 Broughton, R. .... R
135 Smith, C. A. .... R		289 Broughton, John A. .... R
336 Fenton, Frank S. .... R		663 Lyons, E. M. .... R
352 Smith, E. R. .... R		667 Towne, L. A. .... E
500 Emerson, C. A. .... R		700 Clarke, Henry P. .... E
1125 Smith, C. O. .... L		733 Towne, L. E. .... R
1447 Pollock, D. H. .... L		754 Stair, Henry. .... R
1207 Foster, F. S. .... L		760 Stair, John. .... R
281 Bassett, Edw. G. .... A		970 Taylor, D. W. H. .... L
830 Van Wart, Frank. .... A		<b>BRILLION—Calumet Co.</b>
343 Jackson, Fred A. .... A		1250 Whelan, C. F. .... L
<b>BELLEVILLE—Dane Co.</b>		<b>BROWNTOWN—Green Co.</b>
398 Williams, W. T. .... R		317 Kelly, Chas. A. .... A
<b>BERLIN—Marathon Co.</b>		407 Parks, J. L. .... A
17 Britton, C. H. .... R		<b>BURLINGTON—Racine Co.</b>
140 Slater, John W. .... R		240 Denniston, Geo. C. .... R
481 Brown, J. R. .... R		326 Prasch, M. G. .... R
1331 Dodson, Chas. M. .... L		327 Prasch, F. J. .... R
299 Agnew, Edw. S. .... A		1432 Reinardy, Simon M. .... L
391 Pfenning, W. M. .... A		<b>BUTTERNUT—Ashland Co.</b>
<b>BLAIR—Trempealeau Co.</b>		1287 Thompson, John E. .... L
507 Bellerue, John. .... G		<b>CAMBRIA—Columbia Co.</b>
<b>BLOOMINGTON—Grant Co.</b>		61 Evans, Enoch. .... R
13 Window, Arthur J. .... R		498 Rees, Wm. .... R
83 Holford, L. D. .... R		36 Williams, Wm. E. .... M
<b>BLOOMER—Chippewa Co.</b>		264 Roberts, John E. .... A
414 Prill, J. C. .... R		266 Inglehart, Almon. .... A
748 Hathaway, J. R. .... R		369 Rowlands, Robert J. .... A
1008 Robinson, Geo. W. .... L		<b>CASSVILLE—Grant Co.</b>
1042 Brown, Benjamin. .... L		66 Grimm, Aloys. .... R
169 Gearing, Wm. F. .... A		
<b>BLACK RIVER FALLS—Jackson Co.</b>		
261 Werner, F. .... R		
523 Cole, F. W. .... R		

**CAMPBELLSPORT**—Fond du Lac County.

108 Durand, Platt.....R

**CAMBRIDGE**—Dane Co.

443 Bilstad, O.....R

**CASCADE**—Sheboygan Co.

561 Bartlett, L. C.....R

745 Akin, M. R.....R

**CADOTT**—Chippewa Co.

679 Watson, Clark.....R

1203 Young, L. M.....L

**CASHTON**—Monroe Co.

350 DuMez, A. A.....R

1339 Gaines, E. E.....L

**CALAMINE**—La Fayette Co.

472 Ladd, Will P.....R

**CEDARBURG**—Ozaukee Co.

54 Boco, Hugo.....R

668 Hartwig, T.....L

1417 Schiessle, Alfons.....G

**CENTRALIA**—Wood Co.

69 Worthington, R. C.....R

270 Hill, Geo. M.....R

415 Otto, August C.....A

**CHILTON**—Calumet Co.

153 Rollmap, Henry.....R

**CHASEBURG**—Vernon Co.

731 Hoyt, J. W.....R

**CHIPPEWA FALLS**—Chippewa Co.

149 Dettloff, Herman.....R

272 Stapleton, L. W.....R

273 Goddard, H. J.....R

694 Spence, W. G.....R

915 Chisholm, D.....R

1033 Collette, Urgel.....R

1040 Riester, Edw.....L

1271 Wilcox, Albert J.....L

1322 Thomas, O. C.....L

1455 Taylor, David A.....G

345 Watson, Frank.....A

409 Stapleton, Edw. M.....A

**CHETEK**—Barron Co.

711 Hathaway, W. R.....R

**CLEAR LAKE**—Polk Co.

1063 Nilssen, Lars S.....G

279 Briggs, Albert M.....A

384 Briggs, Arthur A.....A

**CLINTONVILLE**—Waupaca Co.

702 Sedgewick, F. A.....R

707 Gansen, Chas.....R

**CLINTON JUNCTION**—Rock Co.

11 Cheever, R. W.....R

165 Woodward, O. L.....R

532 Covert, Geo.....R

637 Yates, John H.....R

638 Simmons, S. J.....R

639 Hartshorn, W. I.....R

1045 Inman, E. C.....L

1242 Collyer, B. B.....L

28 Gilmore, O. C.....A

363 Cornwell, E. H.....A

**COLBY**—Marathon Co.

85 Wilms, B. A.....R

698 Salter, Frank J.....R

**COLUMBUS**—Columbia Co.

495 Williams, John.....R

519 Swarthout, John.....R

703 Quickenden, James.....R

**COOKSVILLE**—Rock Co.

7 Robertson, John G.....M

**COBB**—Iowa Co.

719 Rapsen, Wm. J.....R

**CRANDON**—Forest Co.

321 Masbaum, John.....R

**CROSS PLAINS**—Iowa Co.

208 Rossbach, G. M. Mrs.....A

**CUMBERLAND**—Barron Co.

896 Fuller, J. F.....R

1110 Lonquest, J.....L

1458 Ponkey, H. H.....L

**DARLINGTON**—La Fayette Co.

764 Van Wagenen, H.....R

784 Van Wagenen, E.....R

855 Swift, John V.....R

1427 Ward, Geo.....L

362 Swift, Frank C.....A

**DARIEN**—Walworth Co.

118 Williams, Deloss.....R

280 Young, Riley S.....A

**DARTFORD**—Green Lake Co.

141 Wheeler, J. H.....R

145 Howard, A. Z.....A

**DAYTON**—Green Co.

70 Cunningham, J. P.....M

**DANE**—Dane Co.

72 O'Dwyer, Michael.....M

**DALLAS**—Barron Co.

936 Hurlburt, O. S.....R

**DELAVER**—Walworth Co.

57 Camps, J. H.....R

323 Jackson, S. L.....R

328 Hollister, K. N.....R

476 Briggs, C. A.....R

477 Briggs, Geo. H.....R

1375 Fernholz, Wm. F.....L

**DEERFIELD**—Dane Co.

1139 Andrus, S. G.....L

403 Hooper, E. S.....A

**DELAFIELD**—Waukesha Co.

468 Kunz, W. E.....R

53 Killmer, John.....M

**DE SOTO**—Vernon Co.

572 Rogers, Jas. H.....R

98 Ewers, Olando.....A

**DE PERE—Brown Co.**

635	Wheeler, H. J.	R
609	Lange, E. A.	L
1470	Williams, E. E.	L
421	Messing, Frank J.	A

**DOUSMAN—Waukesha Co.**

56	Moore, Geo. E.	M
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**DODGEVILLE—Iowa Co.**

67	Roberts, James	R
159	Bishop, Wm. A.	R
1068	Williams, Wm. E.	L
1233	Roberts, Henry F.	G

**DOWNING—Dunn Co.**

80	Park, Willis H.	M
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**DORCHESTER—Clark Co.**

4	Homsted, Augustus	M
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**DRUMMOND—Bayfield Co.**

1202	Petty, John C.	L
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**DURAND—Pepin Co.**

940	Morgan, J. J.	L
1179	Gobar, F. J.	L
1409	Campbell, A. A.	L
301	Gobar, Geo. G.	A
2410	Collins, Fred. B.	A

**DUNDEE—Fond du Lac Co.**

683	Arimond, Jacob	R
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**EAU CLAIRE—Eau Claire Co.**

70	Johnson, Wm. C.	R
81	Thompson, G. Tabor	R
95	Neher, John C.	R
349	Lashar, Geo. C.	R
447	Klofanda, A. J.	R
459	Cass, J. E.	R
257	Godding, Ed. E.	G
607	Playter, E. H.	R
761	Kinnear, Wm. A.	R
774	Farr, F. R.	R
800	Winslow, Geo. F.	R
839	Rowan, Edward	R
613	Gadsby, Thos. L.	R
1035	Ballard, Jos. M.	L
1162	Boberg, Otto, J. S.	L
1387	Hvambasahl, C. M.	L
1408	Blestren, H. M. G.	L
1184	Gadsby, F. H.	G
1459	Winslow, Chas. F.	L
186	Baker, D. C.	A
213	Levy Benjamin	A
214	Farr, J. F.	A
284	Urheim, Lars	A
300	Champlin, Thos. F.	A
259	Scott, Walter R.	A

**EAST TROY—Walworth Co.**

421	Griste, P. O.	R
320	Zinn, Otto W.	R
654	Keats, W. S.	R

**EAGLE—Waukesha Co.**

82	Sherman, Geo. A.	M
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**EAGLE RIVER—Oneida Co.**

1413	Beardsley, Frank	L
41	Haddy, Geo. H.	M

**EDGEWORTH—Rock Co.**

42	Banks, Chas. H.	R
655	Doty, Geo. W.	L
981	Willson, B. C.	L
1229	Brown, Joey	L

**ELLSWORTH—Pierce Co.**

230	Moody, John L.	R
1394	Swahn, Adolph	L

**ELKHORN—Walworth Co.**

91	Isham, Fred. W.	R
247	Young, Jacob H.	R
474	Stratton, W. J.	R
475	Stratton, C. J.	R
1104	Erichsen, Ernst	L
1288	Smith, Will	L
1469	Lyon, Will B.	L

**ELK CREEK—Dunn Co.**

55	Parker, Wm. E.	M
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**ELEVA—Trempealeau Co.**

319	Yeomans, Cyrus E.	A
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**ELDORADO—Fond du Lac Co.**

691	Dilts, W. H.	R
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**ELROY—Juneau Co.**

26	Wrightman, Jas. W.	R
1124	Dix, Judson M.	L

**EMBARRASS—Waupaca Co.**

237	Willmarth, A. W.	A
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**ERFURT—Jefferson Co.**

1069	Scheuber, Frank A.	L
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**EUREKA—Winnebago Co.**

119	Chapelle, Lester E.	R
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**ETTRICK—Trempealeau Co.**

1255	Wikstrom, Edw. G.	G
413	Cance, James E.	A

**EVANSVILLE—Rock Co.**

631	Evans, J. M.	R
1059	Evans, J. M., Jr.	L
1086	Crow, Frank M.	L
1116	Carr, Walter M.	L
1373	Reed, Geo. H.	L
216	Race, Warren G.	A
218	Smith, C. M., Jr.	A
367	Van Wart, L.	A

**FAIRCHILD—Eau Claire Co.**

445	Palmer, B. O.	R
65	Arnold, R. E.	M
9	Brown, F. A.	A

**FALL CREEK—Eau Claire Co.**

793	Williams, T. E.	R
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**FALL RIVER—Columbia Co.**

62	Haskin, J. H.	M
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**FENNIMORE—Grant Co.**

457	Dyer, G. W.	R
923	Farnham, J. A.	R
924	Farnham, A.	R

**FIFIELD—Price Co.**

1387	Atwell, W. F.	L
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## FLORENCE—Florence Co.

682	Penberthy, J. S.	R
877	Hocking, W. J.	L

## FOND DU LAC—Fond du Lac Co.

136	Krumme, F.	R
512	Pfaff, Anton.	R
514	Buehholz, Benno.	R
515	Huber, J. C.	R
550	Mitchell, Joseph.	R
659	Richter, A. E.	R
680	Dana, James T.	R
713	Reives, W. H.	R
714	Reives, John E.	R
716	Stiles, S. B.	R
717	Givens, Frank M.	R
762	Kent, Wm. F.	R
808	Breitenstein, W. R.	R
	Remington, L. J.	R
	Remington, N.	R
		G

## GREENWOOD—Clark Co.

433	Thomas, H. J.	R
1464	Douglas, Walter A.	G
278	Buland, Geo. L.	A

## GRANTSBURG—Burnette Co.

77	Olsen, Thorsten.	M
411	Larsen, Otto F.	A

## GREEN BAY—Brown Co.

79	Bliebung, C. T.	R
281	Robinson, John.	R
432	Aldrich, M. J.	R
1066	Rhode, Henry.	R
1127	Beck, Hans Max.	L
1227	Soquet, Raphael.	L
1328	Cawenberg, Jos.	L
1362	Lecomte, Chas.	G
1374	Flatley, Wm. E.	L
357	Van Dycke, Julius.	A

## HAMMOND—St. Croix Co.

		R
		R

642	Nelson.	
957	Hannon, Felix.	
1378	Tiernan, James.	

## FREMONT—Waupaca Co.

503	Kinsman, Jane C.	R
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## FRIENDSHIP—Adams Co.

968	Chalmers, James.	R
32	Harrison, James M.	M

## GALESVILLE—Trempealeau Co.

670	Myhre, G. F.	R
710	Holmberg, G.	R
732	Kneeland, A. H.	R
816	Scarseth, A. J.	R

## GENEVA LAKE—Walworth Co.

381	Hammersley, W. H.	R
403	Arnold, R. B.	G
380	Hammersley, C. H.	R
1163	Windmueller, Emil.	L
1210	Arnold, C. S.	L
1218	Hammersley, W. H., Jr.	G

## GENOA JUNCTION—Walworth Co.

228	Goetze, Will C.	A
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## GILMANTOWN—Buffalo Co.

43	Clark, E. B.	M
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## GRATIOT—La Fayette Co.

123	Marriott, John.	A
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13	Collins, Daniel.	A
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## GRAND RAPIDS—Wood Co.

434	Wood, F. J.	R
391	Wood, Walter L.	L
1117	Voss, H. H.	L
302	McRaith, M. J., Jr.	A
323	Daily, John E.	A

761	Wells.	
1035	Sherman, John.	
1176	Weiss, Anton.	

## HAYWARD—Sawyer Co.

20	Trowbridge, J. B.	M
388	McDonald, Lindsey.	A

## HIGHLAND—Iowa Co.

533	Kennedy, Richard.	R
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## HILLSBOROUGH—Vernon Co.

820	Winslow, L. B. T.	R
76	Pinch, F. I.	M

## HORICON—Dodge Co.

591	Stolz, Otto G.	G
284	Herker, Rowland W.	A
350	Thomas, J. L. B.	A

## HOLMEN—La Crosse Co.

587	Sjolander, C. A.	R
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## HORTONVILLE—Outagamie Co.

799	Rideout, A. F.	L
303	Gansen, Albert.	A

## HUDSON—St. Croix Co.

20	P. Q. Boyden.	R
231	Henning, John O.	R
232	Jaggard, Henry B.	R
1050	Gatchell, Ernst E.	G
1052	Menkey, Louis T.	L
1420	Crawford, W. E.	L
344	Heimstreet, Chas. S.	A

<b>HUSTISFORD—Dodge Co.</b>		
128 Rex, Henry .....	R	
1312 Rex, Chas. H. ....	G	
<b>HURLEY—Ashland Co.</b>		
1065 Hafeureffer, Adolph .....	L	
1215 Whitman, A. C. ....	G	
1296 Bernhard, P. H. ....	L	
392 Madajessky, E. H. ....	A	
423 Arnold, Chas. H. ....	A	
<b>IOLA—Waupaca Co.</b>		
84 Dale, Geo. ....	M	
<b>INDEPENDENCE—Trempealeau Co.</b>		
43 Taylor, Jas. C. ....	R	
<b>IRONTON—Sauk Co.</b>		
30 Fitz Gerald, J. R. ....	R	
<b>IRVING—Jackson Co.</b>		
690 Davis, Margaret E. ....	R	
<b>JANESVILLE—Rock Co.</b>		
5 Helmstreet, E. B. ....	L	
25 Eldredge, Wm. M. ....	R	
144 Yates, C. F. ....	R	
253 Prentice, Fred. F. ....	R	
275 Stevens, Chas. D. ....	R	
283 Evenson, Will E. ....	R	
465 Stearns, Henry C. ....	R	
469 Baker, Jos. P. ....	R	
597 Sherer, Frank. ....	R	
614 McLean, Robert. ....	R	
1156 Evenson, Chas. H. ....	L	
1236 Skelly, Geo. A. ....	L	
142 Sherer, Will T. ....	A	
143 Crouse, Fred. M. ....	A	
206 Palmer, Wm. G. ....	A	
252 Messman, Wm. F. ....	A	
307 Palmer, Herbert L. ....	A	
348 Colling, Wm. H. ....	A	
<b>JEFFERSON—Jefferson Co.</b>		
258 Bechand, A. R. ....	R	
1231 Ray, Fred. O. ....	G	
<b>JUNEAU—Dodge Co.</b>		
170 Haughton, S. V. R. ....	R	
171 Haughton, L. E. ....	R	
1204 Lueck, Geo. W. ....	L	
<b>JUDA—Green Co.</b>		
782 Moldenhauer, W. F. ....	R	
<b>KAUKAUNA—Outagamie Co.</b>		
920 Kellogg, T. M. ....	R	
954 Conner, Jas. G. ....	L	
525 Charlesworth, F. M. ....	R	
1292 Thiemann, V. W. ....	L	
220 Passino, Franklin G. ....	A	
263 Reuter, Peter M. ....	A	
<b>KEWASKUM—Washington Co.</b>		
121 Miller, Chas. ....	R	
<b>KEWAUNEE—Kewaunee Co.</b>		
313 Roberts, John A. ....	R	
314 Roberts, C. B. ....	R	
<b>KENOSHA—Kenosha Co.</b>		
3 Robinson, F. ....	L	
626 Hurd, Chas. H. ....	R	
772 Hollister, E. H. ....	R	
1017 Lamb, Wm. S. ....	L	
1088 Schoenike, E. B. ....	L	
1174 Woodward, O. H. ....	L	
1243 Wickern, Chas. ....	L	
1311 Starkweather, J. B. ....	R	
1358 Robinson, Emma E. ....	L	
229 Schroeder, Wm. H. ....	A	
419 Mead, John L. ....	A	
<b>KENDALL—Monroe Co.</b>		
21 Cutland, Wm. T. ....	R	
723 Dunlap, R. B. ....	R	
<b>KIEL—Manitowoc Co.</b>		
264 Scroeder, Bertha. ....	R	
<b>KINGSTON—Green Co.</b>		
73 Volkmann, Henry. ....	M	
<b>KILBOURN CITY—Columbia Co.</b>		
346 McNeel, Walter. ....	R	
368 Stillman, J. F. ....	R	
480 Jenkins, Geo. W. ....	R	
82 Stillman, H. A. ....	A	
<b>KNAPP—Dunn Co.</b>		
58 Townsend, Chas. ....	M	
<b>LA CROSSE—La Crosse Co.</b>		
1 Spence, Thos. H. ....	L	
94 Mariner, Geo. E. ....	R	
100 McCord, James. ....	R	
185 Pfaffner, Albert. ....	R	
192 Howard, Edwin. ....	R	
502 Bellerue, Albert. ....	G	
516 Simon, Mathias. ....	G	
517 Weston, J. W. ....	R	
544 Lien, E. L. ....	R	
798 Vouells, A. M. ....	R	
806 Runckel, L. A. ....	G	
848 Howard, H. L. ....	R	
849 Howard, Geo. ....	R	
886 Rising, Benjamin. ....	R	
943 Hals, O. O. ....	G	
1005 Beyschlag, Chs. ....	L	
1107 Messer, John. ....	L	
1186 Houck, Oscar. ....	G	
1211 Partridge, H. L. ....	L	
1240 Lang, Mary M. Sister. ....	L	
1258 Rawson, M. A. ....	L	
1377 Patton, Fred. J. ....	L	
1383 Meicklesen, H. C. ....	G	
1436 Hougén, C. A. ....	L	
54 Nyhus, E. H. ....	M	
246 Eberle, Albert C. ....	A	
296 Olsen, Arthur. ....	A	
375 Kindley, John. ....	A	
<b>LANCASTER—Grant Co.</b>		
484 Stone, Wm. N. ....	R	
485 Hassell, S. E. ....	R	
673 Spiegelberg, Emil. ....	R	
1185 Bennett, Jos. T. ....	G	
1368 McKenzie, Frank E. ....	L	
<b>LAKE MILLS—Monroe.</b>		
870 Engsberg, Conrad. ....	G	
972 Wegemann, A. H. ....	R	
<b>LA GRANGE—Walworth Co.</b>		
1270 Harris, Frank. ....	L	
<b>LIME RIDGE—Sank Co.</b>		
408 Edwards, Adelbert. ....	A	

<b>LIMA CENTRE—Rock Co.</b>	
1465 Austin, Merchant E.....	L.
<b>LIVINGSTON—Grant Co.</b>	
16 Cocklin, J. S.....	M.
<b>LONE ROCK—Richland Co.</b>	
125 Wolf, Abraham .....	R.
<b>LOWELL—Dodge Co.</b>	
133 Benson, F. W .....	R.
12 Benson, Anna E.....	A.
<b>LODI—Columbia Co.</b>	
193 Hinds, A. H.....	R.
843 McCloud, Jas.....	R.
844 McCloud, Jas. W.....	R.
1213 Gordon, Geo. O.....	L.
<b>LYONS—Walworth Co.</b>	
31 Reeve, G. G.....	R.
<b>MADISON—Dane Co.</b>	
2 Hollister, A. H.....	R.
365 Mayers, Andrew A.....	R.
427 Sumner, Edwin .....	R.
567 Naffz, Chas. H.....	R.
581 Pardee, A. A.....	R.
582 Avery, Chas. H.....	R.
596 Cunradi, August .....	R.
838 Clark, John H.....	R.
903 Bernhard, C. H.....	G.
1098 Lewis, Henry.....	L.
1129 Menges, A. F.....	L.
1064 Dow, C. M.....	L.
1289 Haley, John C.....	L.
1290 Werbke, N. C.....	L.
1381 Ott, Harlow S.....	G.
1403 Cambler, Jacob .....	G.
1440 Hellstern, Edw.....	L.
1 Swalo, Frank.....	A.
396 Tomkins, Chas. F.....	A.
<b>MANITOWOC—Manitowoc Co.</b>	
50 Hinrichs, F.....	R.
90 Buerstatte, F. C.....	G.
117 Hinrichs, Henry .....	R.
130 Alter, O. A.....	R.
490 Stock, Emil F.....	R.
1080 Barnstein, J. E.....	L.
1198 Knutzen, Knud O.....	L.
1468 Kostlevy, Anton.....	L.
<b>MAYVILLE—Dodge Co.</b>	
120 Sauerhering, R.....	R.
492 Schoen, A. F.....	R.
1245 Sauerhering, Edw.....	L.
<b>MARINETTE—Marinette Co.</b>	
127 Whitman, Levi E.....	R.
618 John, D. W.....	R.
896 Fairchild, C. M.....	R.
925 Fairchild, A. M.....	R.
939 Whitman, Alice.....	R.
1208 Walsh, C. C.....	L.
1327 Walsh, Phebe E. Mrs.....	L.
1406 Raiche, Wm. J.....	L.
80 Strong, J. L.....	A.
<b>MARION—Waupaca Co.</b>	
152 Perry, J. W.....	R.
<b>MARSHALL—Dane Co.</b>	
494 Kelly, W. P.....	R.
332 Kelly, Lorin F.....	A.

<b>MARKESAN—Green Lake Co.</b>	
531 Atkinson, Thos. Jr.....	R.
<b>MAUSTON—Juneau Co.</b>	
438 Grimmer, F. E.....	R.
473 Penniman, H. G.....	R.
1087 Grimmer, W. A.....	L.
1167 Grimmer, F. E. Jr.....	L.
1291 Nichols, Geo. B.....	L.
397 Comer, Peter J.....	A.
<b>MAZOMANIE—Dane Co.</b>	
603 Campbell, D. W.....	R.
604 Smith, Fred A.....	R.
921 Grant, D. C.....	L.
<b>MARTEL—Pierce Co.</b>	
522 Johnson, J. F. Jr.....	R.
894 Forsyth, A. P.....	R.
<b>MARSHFIELD—Wood Co.</b>	
425 Sexton, W. A.....	G.
1010 Budge, W. H.....	L.
1389 Sexton, Andrew.....	G.
1457 Huffmier, L. A.....	L.
<b>MAIDEN ROCK—Pierce Co.</b>	
840 Stevenson, J. E.....	R.
1404 Steele, Robert C.....	L.
<b>MANAWA—Waupaca Co.</b>	
89 Woodnorth, F. S.....	A.
248 Jurgensohn, B. G.....	A.
<b>MENEKAUNE—Marinette Co.</b>	
948 Thompson, H. G.....	L.
<b>MERRIMACK—Sauk Co.</b>	
47 Steiber, R. C.....	A.
<b>MENOMINEE—Dunn Co.</b>	
442 Ranum, O. K.....	R.
461 Johnson, F. D.....	R.
1014 Pillsbury, A. Jr.....	G.
1064 Lindstrom, T. G.....	G.
1303 Johanson, Julius.....	L.
412 Ehrhard, Louis.....	A.
<b>MENASHA—Winnebago Co.</b>	
129 Merklin, Wm. A.....	R.
1051 Rosch, John.....	L.
<b>MERRILL—Lincoln Co.</b>	
308 King, E. S.....	R.
207 Hillyer, F. H.....	R.
661 Wiley, C. L.....	R.
962 Drinker, John T.....	R.
974 Inman, Chas.....	R.
1306 Feiker, Gus. A.....	L.
1430 Wolff, W. J.....	L.
231 Kanwirtz, Theo.....	A.
<b>MEDFORD—Taylor Co.</b>	
951 Suits, C. G.....	L.
1392 Hammel, Jos.....	I.
277 Tonne, Wm. H.....	A.
<b>MELROSE—Jackson Co.</b>	
460 Newland, V. B.....	R.
63 Newland, Prudence T.....	A.
64 Newland, V. M.....	A.

**MERRILLON—Jackson Co.**

566	Trumbull, Jay	R
783	Merrill, Oscar H	R
790	Moore, E. E.	R

**MINERAL POINT—Iowa Co.**

396	Prideaux, W. H.	R
669	Pulford, R. D.	R
705	Vivian, John H.	R
1414	Pittman, Frank	G
1444	Vivian, Fred	L
389	Bliss, Wm. P.	A

**MILTON—Rock Co.**

6	Clarke, W. P.	R
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**MILTON JUNCTION—Rock Co.**

537	Gates, W. H.	G
1333	McClafferty, J. A.	L

**MONDOVI—Buffalo Co.**

122	Wyman, W. W.	R
720	Nelson, C. R.	R

**MONTELLO—Marquette Co.**

363	Pratt, H. J.	R
55	Pratt, M. H.	A
225	Bass, Edw. A.	A

**MT. HOREB—Dane Co.**

267	Evans, Nells C.	A
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**MONROE—Green Co.**

280	Trukenbrod, W. F.	R
290	Ellert, J. K.	R
528	Stearns, W. P.	R
632	Lichtemvalner, A. F.	R
633	Banks, Geo. W.	R
916	Lytle, C. A.	R
1324	Steinmann, Gustave	G
1346	Leland, A. M.	G
155	Studley, G. G.	A
339	Eley, Edwin E.	A
405	Darling, F. E.	A

**MONTFORT—Grant Co.**

671	Thomas, J. A.	R
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**MUSCODA—Grant Co.**

331	Jeffries, Wm. H.	R
644	David, Frank A.	R
366	Mann, John F.	A
386	Hasler, S. J.	A
417	Masilko, Frank V.	A

**MUKWONAGO—Waukesha Co.**

508	Andrews, L. G.	R
509	Wood, Frank A.	R
815	Clohisly, J.	R

**MILWAUKEE—Milwaukee Co.**

1	Conrath, Adam	G
62	Hummel, H. D.	R
12	Schulz, Fred M.	R
72	Bender, Wm.	R
74	Widule, Christian	R
101	Patterson, M. F.	R
102	Patterson, J. G.	R
134	Wolfrum, Geo.	R
143	Niedecken, Frank	R
150	Melbohm, Henry	R
156	Hough, Geo. D.	R
163	Sykes, H. D.	R
34	Holden, Justin	R

178	Pierce, Harvey S.	R
180	Eckstein, S. A.	R
181	Wright, Geo. H.	R
182	Wright, A. T.	R
183	Dadd, R. M.	R
184	Jones, Daniel R.	R
220	Guenderoth, Oscar	G
237	Dadd, John A.	R
239	Allcott, J. M.	R
249	Wright, S. J.	R
277	Unger, Fred. M.	R
310	Ernst, G. P.	R
302	Drake, J. R.	R
303	Drake, H. T.	R
304	Drake, H. W.	R
305	Richardson, A. B.	R
306	Webb, F. E.	R
307	Gieseler, E.	L
309	Gregory, H. B.	R
311	Barr, Wm. H.	R
315	Babcock, E. L.	R
322	Kienth, John	G
330	Hunter, Murray M.	R
338	Ladwig, F. F.	R
341	Ladwig, Paul	L
343	Schranck, H. C.	G
353	Pflugradt, Chas.	R
355	Wiese, C. H.	R
357	Wiese, R.	R
359	Esau, Fred	L
366	Thiele, Otto A.	G
390	Dorestan, H.	G
391	Meyer, Louis	R
401	Krembs, Ernst	R
404	Ritmeyer, Wm.	R
409	Josse, Geo.	R
411	Von Baumbach, Chas.	R
412	Gerhardy, Theo.	G
422	Schorse, Otto	R
430	Schmitz, V. A.	R
448	Von Trost, August	R
487	Anneke, C.	G
501	Schulz, H. L.	L
542	Oressby, Wm. G.	R
549	Kalekhoff, L. G.	R
565	Kropp, Wm.	R
590	Wallschlaeger, F.	G
593	Goes, G. G. K.	G
594	Goes, Wm. A.	G
627	Strohmeier, Chas. H.	R
628	Strohmeier, H. L.	R
789	Hackendahl, H. H.	R
833	Appel, Wm.	R
872	Meadows, Samuel H.	G
874	Hopp, A.	L
890	Nau, Frank	L
891	Fess, Henry	L
899	Rapp, Louis	L
900	Boettcher, Henry	L
932	Abbott, Frank	R
946	Lotz, Louis	G
969	Dorestan, Enno	G
979	Kaiser, Wm.	L
982	Leuders, Alfred	L
989	Knobloch, Karl	G
990	Gessler, Max	G
993	Dietz, Emil	L
994	Hillmantel, Louis Jr.	L
995	Bartel, Max	L
1000	Hensel, Geo. E.	L
1002	Stoetzer, Henry	L
1021	Lochemes, W. T.	L
1024	Andrae, Julius	L
1025	Kannenber, Geo	L
1030	Huffschnidt, Frank	L

1055 Draper, W. C. . . . . L  
 1068 Szarzynski, Chas. . . . . L  
 1080 Brown, A. . . . . G  
 1095 Luethe, A. . . . . G  
 1101 Segall, Wm. . . . . L  
 1112 Grieb, F. J. . . . . G  
 1114 Zinn, Oscar. . . . . G  
 1122 Drake, L. M. . . . . L  
 1123 Foster, Chas. B. . . . . L  
 1133 Shead, A. A. . . . . L  
 1138 Frank, Herman O. . . . . G  
 1141 Kremers, Edward. . . . . L  
 1146 Ruenzel, H. G. . . . . G  
 1147 Kuehnle, G. F. . . . . G  
 1153 Emmerich, Herman. . . . . L  
 1158 Roerig, Wm. . . . . L  
 1160 Kropf, O. A. . . . . G  
 1165 Kossat, Chas. . . . . L  
 1169 Krous, F. M. . . . . L  
 1177 Goetz, Max J. . . . . L  
 1183 Baldauf, Geo. L. . . . . L  
 1187 Collins, F. M. . . . . R  
 1188 Speigal, A. . . . . R  
 1189 Meachem, John M. . . . . R  
 1194 Kettler, E. Jr. . . . . L  
 1200 Rauschenberger, J. F. . . . L  
 1214 Heider, Henry G. . . . . G  
 1216 Cohn, A. H. . . . . G  
 1222 Weber, John P. . . . . G  
 1223 Reinholdt, Max. . . . . L  
 1230 Tomkewitz, John W. . . . L  
 1237 Banks, Geo. E. . . . . L  
 1247 Schulz, G. H. E. . . . . L  
 1248 Kaumhiemer, M. . . . . L  
 1249 Roth, E. G. . . . . G  
 1253 Hiecke, Wm. . . . . G  
 1254 Reinholdt, H. O. . . . . G  
 1256 Burger, C. F. Jr. . . . . G  
 1259 Maas, John. . . . . L  
 1261 Szarzynski, Max. . . . . L  
 1265 Trompewski, Jos. . . . . L  
 1267 Knobloch, August. . . . . L  
 1268 Kortebein, H. F. . . . . L  
 1269 Dietz, Mathias. . . . . L  
 1274 Martens, J. A. . . . . G  
 1279 Riechel, H. C. . . . . L  
 1284 Lambeck, Herman. . . . . L  
 1296 Blankenhorn, A. . . . . L  
 1297 Hoya, Wm. C. . . . . L  
 1304 Schneider, Wm. . . . . L  
 1306 Gallaher, Chas. S. . . . . L  
 1308 Mieding, A. E. . . . . G  
 1317 Werner, Reinhold. . . . . L  
 1318 Mitchell, Andrew S. . . . . L  
 1364 Janssen, Jacob S. . . . . L  
 1360 Somner, Richard. . . . . G  
 1365 Wagner, Rudolph M. . . . L  
 1376 Ladd, Thomas M. . . . . L  
 1398 McMillen, M. W. . . . . G  
 1402 Bunsen, Robert F. . . . . L  
 1410 Sonnemann, Chas. . . . . L  
 1412 Conrad, Carl J. . . . . L  
 1421 Heydorn, Chas. F. . . . . L  
 1422 Matthieson, Chris. D. . . . L  
 1423 Stangl, Joseph A. . . . . L  
 1429 Levy, Ben. L. . . . . L  
 1439 Beyer, Theo. . . . . G  
 1442 Wehle, Wm. J. . . . . L  
 1446 Roeheld, H. F. W. . . . . L  
 1448 Marnitz, Louis. . . . . G  
 1451 Wegner, Emil A. . . . . L  
 1426 Naffz, G. . . . . G  
 1461 Wiese, Rudolph W. . . . . G  
 2 Brain, L. J. . . . . A  
 42 Alicott, C. F. . . . . A

106 Decker, J. D. Jr. . . . . A  
 153 Hillmantel, Henry. . . . . A  
 234 Riehl, Fred. W. . . . . A  
 240 Kressin, Louis. . . . . A  
 242 Walischlaeger, Wm. C. . . . A  
 243 Urban, L. C. . . . . A  
 247 Bours, Thos. R. . . . . A  
 272 Hassinger, Louis. . . . . A  
 273 Stoltz, Herman J. . . . . A  
 310 Klemm, Paul E. . . . . A  
 312 Mattiesen, Geo. J. . . . . A  
 324 Schmit, Louis. . . . . A  
 331 Schwanberg, Paul F. . . . . A  
 336 Hassenmiller, J. J. . . . . A  
 338 Buckley, F. J. . . . . A  
 347 Hunkel, Carl G. . . . . A  
 356 Boerner, R. W. . . . . A  
 359 Hennei, Casper A. . . . . A  
 360 Banaszynski, Jos. C. . . . . A  
 361 Waagemann, T. C. . . . . A  
 364 Billerbeck, C. . . . . A  
 374 Schmitz, Albert C. . . . . A  
 368 Terhorst, Daniel. . . . . A  
 371 Zimmermann, C. O. . . . . A  
 372 Maguire, Frank. . . . . A  
 378 Clausen, Christian. . . . . A  
 385 Koch, Wm. D. . . . . A  
 387 Wolff, Adolf F. G. . . . . A  
 390 Halm, Edward. . . . . A  
 395 Brunk, Ed. W. Jr. . . . . A  
 398 Schorse, Gustave O. . . . . A  
 401 Stein, Arthur E. . . . . A  
 404 Hempe, Edw. A. . . . . A  
 416 Sylvester, Arthur F. . . . . A  
 420 Kuntz, Wm. G. . . . . A  
 422 Dick, Wm. H. . . . . A

## NEW LONDON—Waupaca Co.

88 Trayser, Anthony. . . . . R  
 451 Jillson, A. W. . . . . R  
 377 Trayser, Walter A. . . . . A

## NEW RICHMOND—St. Croix Co.

116 Johnson, Wm. R. K. . . . . R  
 435 Sabin, John C. . . . . R  
 1276 Crapser, Jule H. . . . . L  
 1454 Aldrich, Belle E. Mrs. . . . L  
 91 Allen, Henry C. . . . . A  
 400 Kaye, Evan O. . . . . A

## NEW LISBON—Juneau Co.

168 Morrison, James Mrs. . . . . R  
 169 Morrison, James. . . . . R  
 797 Nichols, E. B. . . . . R  
 1435 Elwell, Fred. O. . . . . L

## NEILLSVILLE—Clark Co.

471 Sniteman, C. C. . . . . G  
 742 Youmans, H. J. . . . . R  
 1407 Zimmerman, R. E. . . . . L  
 1456 Sontag, Geo. L. . . . . G

## NEOSHO—Dodge Co.

252 McCollow, John M. . . . . R

## NEENAH—Winnebago Co.

244 Kimberly, D. L. . . . . R  
 245 Elwers, F. . . . . L  
 415 Marsh, E. B. . . . . R  
 641 Gleason, H. J. . . . . R  
 1273 Sorley, Emil B. . . . . R  
 1384 Golingefsky, Chas. E. . . . . G  
 1466 Barnett, M. E. . . . . L  
 256 Melcher, W. A. . . . . A

NECEDAH—Juneau Co.		
708 Canfield, Thos. M.	R	
1180 Seaman, Emma J.	L	
1278 Ward, Jennie R.	L	
1355 Bryant, Jessie E.	G	
NORTH PRAIRIE—Waukesha Co.		
216 Swan, Wm. E.	R	
NORTH FREEDOM—Sauk Co.		
18 Wetmore, N. F.	M	
NORWALK—Monroe Co.		
86 Fischer, Wm.	M	
91 Roof, Alex	M	
NORTH CAPE—Racine Co.		
729 Spillum, Geo.	R	
OAKFIELD—Fond du Lac Co.		
847 Burns, Thos.	R	
863 Burns, J. W.	R	
OCONOMOWOC—Waukesha Co.		
296 Lardner, W. L.	R	
384 Brown, F. B.	R	
385 Dibble, W. S.	R	
1379 Thompson, Chas. N.	G	
326 Steker, F. A.	A	
380 Erhart, O. T.	A	
OSSEO—Trempealeau Co.		
175 Wooster, A. L.	R	
499 Newell, Geo. F.	R	
48 Hotchkiss, H. E.	A	
OCONTO—Oconto Co.		
186 Ford, S. W.	R	
956 Ford, J. L.	L	
1067 Mitchell, Wm. B. Jr.	L	
1074 Luckenbach, A. H.	L	
1326 Germond, Harry J.	L	
OGDENSBURG—Waupaca Co.		
919 Moses, John R.	R	
OMRO—Winnebago Co.		
218 Douty, C. S.	R	
ONALASKA—La Crosse Co.		
449 Beach, Allison	R	
1182 Aldrich, W. H.	L	
ONTARIO—Vernon Co.		
737 Sloggy, Samuel	R	
802 Phelps, H. J.	R	
ORFORDVILLE—Rock Co.		
78 Taylor, Chas.	M	
OREGON—Dane Co.		
432—Aldrich, M. J.	R	
OSHKOSH—Winnebago Co.		
78 Schmidt, J. F. W.	R	
127 Von Kass, A. M.	R	
160 Griffiths, Peter A.	R	
444 Froelich, J. A.	R	
558 Claggett, F. B.	R	
598 Penniman, H. H.	R	
601 Bauman, Geo.	R	
748 Wegener, H. J.	R	
803 Williams, Chas. E.	R	
804 Williams, M. J.	R	
1092 Weber, Andrew	L	
1094 Horn, E. A.	G	
1220 Bauman, L. A.	G	
1228 Hicks, J. W.	L	
1246 Krause, H. C.	L	
1283 Ritter, John H.	L	
1342 Horn, Chas. G.	G	
187 Bass, Henry	A	
17 Huntington, Wm. H.	A	
274 Callies, Frank E.	A	
376 Weisbrod, Chas. A.	A	
383 Vogel, Edw. W.	A	
OSCEOLA—Polk Co.		
285 Staples, C. W.	R	
55 Staples, F. D.	A	
OTSEGO—Columbia Co.		
928 Pulver, W. A.	R	
OXFORD—Marquette Co.		
551 Chilson, Benjamin	R	
PARDEEVILLE—Columbia Co.		
113 Van Schalck, S. Mrs.	R	
PALMYRA—Jefferson Co.		
210 Washburne, R. J.	R	
PEWAUKEE—Waukesha Co.		
1400 Cameron, Claude N.	L	
PESHTIGO—Marinette Co.		
942 Conklin, John S.	R	
630 Sonn, Jas. V. N.	R	
PHILIPS—Price Co.		
194 Sperry, Willis P.	A	
PITTSVILLE—Wood Co.		
89 Wood, M. B.	M	
420 Basteen, Wm. J.	R	
1319 Simonson, J.	L	
PLATTEVILLE—Grant Co.		
63 Wright, Geo. W.	R	
740 Goodell, L. L.	R	
907 Drinkall, T. O.	L	
1152 McNett, John L.	L	
1155 Wright, Chas. E.	L	
1445 Ruckes, John C.	L	
PLOVER—Portage Co.		
14 Pierce, N. F.	R	
PLYMOUTH—Sheboygan Co.		
248 Pfeifer, Chas.	R	
656 Schlaich, Julius	R	
1011 Faber, Chas. A.	L	
100 Pfeifer, Emma	A	
PLUM CITY—Pierce Co.		
688 Schulthess, J. J.	R	
PLAINFIELD—Waushara Co.		
345 Pratt, Hiram	R	
520 Borden, B. B.	R	
11 Stevens, Theo. W.	M	
PORT WASHINGTON—Ozaukee Co.		
24 Young, Nicholas	R	
278 Audier, M.	R	
POYNETTE—Columbia Co.		
98 Hinkson, E. E.	R	
570 Squire, L. A.	R	



## PORTAGE—Columbia Co.

190	Purdy, Edmund.....	R
191	Stevens, W. B.....	R
221	Graham, John.....	R
228	Edwards, W. M.....	R
657	Goss, H. S.....	R
1219	Rhyme, F. A.....	G
1281	Merrell, B. D.....	L
33	Bellinghausen, H. L.....	A

## PRAIRIE DU CHIEN—Crawford Co.

93	Wright, E. M.....	R
243	Brower, Arthur.....	R
704	Brower, T. L.....	R
1399	Wright, Elmer E.....	G
90	Curran, Jas. A.....	M

## PRINCETON—Green Lake Co.

259	Lichtenberg, O. H.....	R
560	Millard, N. T.....	R
986	Mueller, Richard.....	R
39	Zobel, Ida.....	A
354	Mueller, Frank.....	A

## PROSPECT HILL—Waukesha Co.

535	Winton, L. S.....	R
536	Winton, T. S.....	R

## PRESCOTT—Pierce Co.

912	Welch, E. R.....	R
913	McCray, H. B.....	R
914	McCray, Carlos.....	R
933	Welch, G. P.....	R

## PRAIRIE DU SAC—Sauk Co.

1115	Daubuer, F. F.....	G
333	Stevens, John V.....	A

## PRAIRIE FARM—Barron Co.

329	Farness, Ole W.....	A
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## RACINE—Racine Co.

36	Robinson, Richard.....	R
300	Fancher, F. L.....	R
394	Marlott, Geo. D.....	R
576	Griswold, E. W.....	L
606	Harbridge, F.....	R
616	Stone, W. L.....	R
617	Stone, H. G.....	R
621	Mazanti, Henry.....	G
622	Schulze, T.....	L
624	Schulze, W.....	G
664	Lochner, John T.....	R
876	Gieseler, Chas. L.....	L
922	Morris, M. D.....	R
1118	Rokker, Henry.....	L
1325	Steinicka, Frank.....	L
1367	Raben, C. Emil.....	L
1359	Schulze, John.....	L
241	Elliott, G. S.....	A
282	Weber, Herman F.....	A
321	Snyder, Carl B.....	A
346	Lloyd, Wm. J.....	A

## RANDOLPH—Columbia Co.

539	Lightner, J. A. Mrs.....	R
540	Lightner, J. A.....	R
623	Lightner, J. S.....	R

## REEDSBURG—Sauk Co.

317	Ramsey, W. H.....	G
1079	Kordenat, C. F. W.....	G
1157	Weaver, Ike.....	L
355	Mueller, Frank.....	A

## RICHLAND CENTER—Richland Co.

568	Allen, H. B.....	R
686	Brimer, John N.....	R
739	Cleveland, I. A.....	R
1280	Burnham, J. W.....	L
1356	Smith, F. O.....	L
260	Dieter, J. W.....	A
340	Dieter, C. H.....	A

## RIPON—Fond du Lac Co.

930	Doyle, Chas. A.....	R
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## RIVER FALLS—Price Co.

155	Freeman, R. S.....	R
104	Brier, Warren J.....	R
1106	Taggart, C. R.....	L

## RICE LAKE—Barron Co.

623	Heintz, N. W.....	R
1015	Aasberg, S. J.....	G
1031	Noble, Fred S.....	L
1300	Schmit, John N.....	L

## RHINELANDER—Lincoln Co.

1111	Hinman, Anna A. Mrs.....	L
1332	Reardon, J. J.....	L

## ROCK ELM CENTER—Pierce Co.

20	Clough, John A.....	A
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## ROCHESTER—Racine Co.

128	Cady, Lizzie S.....	A
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## ROSENDALE—Fond du Lac Co.

348	Hall, Storrs.....	R
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## ROBERTS—St. Croix Co.

364	Sanford, O. D.....	R
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## ROYALTON—Waupaca Co.

405	Craig, W. R.....	R
406	McCord, T. B.....	R

## SAND CREEK—Dunn Co.

728	Noer, Ole.....	R
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## SAXEVILLE—Waushara Co.

775	Milliken, N. W.....	R
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## SAUK CITY—Sauk Co.

785	Cunradi, Robert.....	R
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## SEXTONVILLE—Richland Co.

625	Callum, A. M.....	R
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## SEYMOUR—Outagamie Co.

910	Le Mieux, L. A.....	L
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## SENECA—Crawford Co.

24	Smethhurst, Daniel.....	M
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## SHARON—Walworth Co.

40	Morris, David G.....	R
208	Underhill, H. D.....	R
209	Lowell, D. W.....	R
692	Morris, Libbie J.....	R

## SHEBOYGAN—Sheboygan Co.

71	Mahlendorf, A. Jr.....	R
164	Kuener, Adolph.....	R
579	St. Sure, W. O.....	R
1878	Zaezel, Max R.....	G
1323	Neumeister, Otto C.....	G
1382	Meyer, Louis C.....	G

**SHEBOYGAN FALLS**—Sheboygan County.

106 Thiemann, F. W. .... R

**SHOPIERE**—Bock Co.

158 Manley, A. B. .... R

**SHAWANO**—Shawano Co.

255 Cantwell, Wm. H. .... R  
 779 Naber, F. D. .... R  
 1192 Williams, John L. .... L  
 1336 Naber, Chas. C. .... L

**SHULLSBURGH**—La Fayette Co.

557 Griswold, D. C. .... R

**SHELL LAKE**—Burnette Co.

1008 Robinson, Geo. W. .... L

**SOLDIERS' GROVE**—Crawford Co.

373 Smith, R. L. .... R

**SOUTH WAYNE**—Washington Co.

328 Woolhelser, Anna A. .... A

**SPRING GREEN**—Sauk Co.

131 Davies, D. D. .... R

**SPENCER**—Marathon Co.

263 Heath, Edwin .... R  
 941 Graves, S. D. .... R  
 111 Heath, Mary C. .... A

**SPARTA**—Monroe Co.

109 Crane, E. W. .... R  
 234 Newton, F. N. .... R  
 357 Palmer, W. F. .... R  
 795 Howell, H. S. .... R

**SPRING PRAIRIE**—Walworth Co.

562 Hubbard, E. C. .... R  
 859 Puffer, Geo. D. .... R

**SPOONER**—Washburn Co.

265 Hare, G. W. .... A

**ST. CROIX FALLS**—Polk Co.

266 Isaacson, Alfred .... R  
 1416 Wilson, Elmer Y. .... L

**STOCKBRIDGE**—Calumet Co.

869 Merrill, John M. .... R  
 417 Thompson, Louisa M. .... R

**STAR**—Vernon Co.

734 Carpenter, Amos. .... R

**STEVENS POINT**—Portage Co.

297 Cadman, John .... R  
 298 Cadman, Lizzie E. .... R  
 377 Puffer, J. D. .... R  
 538 Congdon, Jas. R. .... R  
 769 Mitchell, W. W. .... R  
 1472 Nix, John M. .... L  
 92 Puffer, M. L. Mrs. .... A  
 181 Moe, Oscar C. .... A

**STOUGHTON**—Dane Co.

375 Sheldrup, A. F. .... R  
 647 Falk, O. N. .... R  
 648 Falk, F. N. .... R  
 724 Melaas, O. O. .... R  
 727 Rutlin, Lars. L. .... R  
 1388 Steinle, William .... G

1396 Poser, Edw. M. .... G  
 191 Lothe, Ole H. .... A

**STAR PRAIRIE**—St. Croix Co.

971 Millard, C. F. .... R

**STURGEON BAY**—Door Co.

1343 Reichel, Lizzie W. Mrs. .... G  
 1348 Hildebrandt, Fred. .... G  
 85 Love, P. J. .... M

**STOCKHOLM**—Pepin Co.

1006 Bellerue, Emanuel .... L  
 50 Peterson, Karl A. .... M

**SUN PRAIRIE**—Dane Co.

52 Lewis, L. V. .... R  
 556 Crosse, T. P. .... R  
 569 Crosse, C. G. .... R  
 32 Lewis, Ada A. .... A

**THORP**—Clark Co.

753 Stone, C. F. .... R  
 204 Gansen, Wm. .... A

**TOMAH**—Monroe Co.

1061 Enckhausen, Harry .... L  
 1150 McNeel, Jas. S. .... L  
 1294 Calkins, Chas. A. .... L  
 21 Hallett, John W. .... A  
 151 Tobey, Chas. E. .... A

**TOMAHAWK**—Lincoln Co.

796 Macomber, C. E. .... R  
 937 Van Dusen, C. A. .... R

**TREMPEALEAU**—Trempealeau Co.

18 Pierson, J. H. .... R  
 12 Pierson, J. S. .... A

**TWO RIVERS**—Manitowoc Co.

199 Gebhart, H. M. .... R  
 358 Kirst, C. F. .... A

**UNION GROVE**—Racine Co.

27 Buchan, T. G. .... R  
 25 Callender, Wm. J. .... A  
 45 Gilluly, J. P. .... A

**UNION CENTRE**—Juneau Co.

211 Gilluly, Thomas. .... R

**UNITY**—Marathon Co.

83 Clark, Jas. H. .... M

**VIROQUA**—Vernon Co.

902 Trowbridge, C. H. .... R  
 1260 Dahl, Chas. F. .... R  
 1453 Schee, John. .... G  
 1467 Johnson, Andrew J. .... L

**VIOLA**—Richland Co.

458 Burgor, N. H. .... R  
 574 Mathews, C. F. .... R

**WATERTOWN**—Jefferson Co.

223 Brennecke, R. .... R  
 224 Steinfert, Henry. .... R  
 497 Eberle, Herman. .... G  
 1072 Thomson, T. L. .... L  
 1334 Rau, August. .... L  
 1391 Gamm, Chas. A. .... L  
 1397 Polzin, Leo. .... L  
 1438 Schultz, A. W. .... G



288	Brennecke, H. A.	A
337	Bellack, Julius.	A
WAUTOMA—Waushara Co.		
425	Sexton, W. A.	G
684	Nickerson, L.	E
WAUNEKEE—Dane Co.		
629	Hudson, Chas.	E
WAUPACA—Waupaca Co.		
46	Woodnorth, J. H.	E
77	Whipple, Frank	E
496	Calkins, G. H.	E
643	Bailey, Ransom	E
832	Baldwin, W. C.	E
743	Poppe, H. B. B.	E
1195	Pelton, L. H.	L
1395	Lorentz, G. L. W.	L
353	Ovrom, Walter	A
WATERLOO—Jefferson Co.		
145	Humphrey, A. J.	R
736	Faillinger, Conrad	E
379	Hayhurst, Will C.	A
WAUPUN—Dodge Co.		
575	Patton, E. B.	L
WAUKESHA—Waukesha Co.		
23	Ryall, E. C.	R
236	Jackson, Calvin	E
428	Wardrobe, F.	E
625	White, I. M.	E
909	Dunlap, C. L.	L
1075	Blair, W. G.	L
1091	Sanner, W. L.	L
1100	Nelson, C. E.	L
1119	Dunlap, W. F.	L
1082	Estberg, A. C.	L
1166	Segall, Jacob	L
93	Sanner, John L.	A
393	Williams, John S.	A
WARREN MILL—Monroe Co.		
841	Barker, W. A.	R
WAUZEKA—Crawford Co.		
3	Sillge, W. M.	M
5	Vaughan, W. A.	M
WAUSAU—Marathon Co.		
398	Frost, H. A.	R
399	Frost, Harriet A.	R
590	Pardee, E. D.	R
776	Frost, H. E.	R
860	Morman, F. H.	R
1081	Albers, W. W.	G
1344	Krause, C. H.	L
1428	Adam, G. W.	L
165	Stoddard, E. B.	A
WALDO—Sheboygan Co.		
1437	Corbett, Geo. W.	G
19	Lawson, R. W.	M
287	Blackburn, A. T.	A
WASHBURN—Grant Co.		
611	Baumbach, C. A.	R
1411	Owen, Edwin S.	L
166	Dorn, Byron	A
WEST SALEM—La Crosse Co.		
19	Johnson, Alex.	R
1093	Rynning, J. G. M.	L
352	Gullickson, Thor.	A

WEST BEND—Washington Co.		
58	Wolftrum, F.	R
1321	Gieseler, Otto A.	G
1364	Loepfe, A. J.	L
WESTFIELD—Marquette Co.		
60	Abbott, Frank	R
31	Hill, H. D.	M
WEYAUWEGA—Waupaca Co.		
38	Post, L. D.	A
WESTBY—Vernon Co.		
37	Ramsland, E.	M
322	Noer, Olaf	A
WEST LIMA—Richland Co.		
132	Tillon, Harvey D.	R
WEST SUPERIOR—Douglas Co.		
251	Hanson, John	R
399	Slocum, C. H.	R
584	Draper, A. E.	R
1034	Johnson, Matt J.	L
1299	Somerville, R.	L
1405	Johnson, John B.	G
1443	Aust, Chas. W.	L
1307	Boehme, Cha. A. Jr.	G
1463	Frisbee, M. E.	L
382	Rupp, John	A
WATERFORD—Racine Co.		
640	Moe, Chas.	R
665	Palmer, N. H.	R
987	Noll, Louis	R
103	Moe, Geo.	A
192	Noll, Louis L.	A
WHITEWATER—Walworth Co.		
55	O'Connor, F. M.	R
56	O'Connor, H. J.	R
339	Burk, A. F.	G
340	Burk, A. V.	R
813	Van Valen, D.	R
1349	Weeden, W. H.	G
1393	Gerrett, Frank A.	L
365	Wakeman, Chas. A.	A
WHITEHALL—Trempealeau Co.		
778	Heyerdahl, Albert	R
WINNECONNE—Winnebago Co.		
1310	Knudson, K.	R
305	Bakke, Peter O.	A
WILMOT—Kenosha Co.		
176	Thompson, J. F.	R
WILTON—Monroe Co.		
347	Martin, T. L.	R
WILD ROSE—Marathon Co.		
861	Smart, Chas. A.	E
WILSON—St. Croix Co.		
270	Turner, Frank H.	A
WITTENBERG—Shawano Co.		
212	Puncher, Edw.	A
WONEWOC—Juneau Co.		
105	Wolfenden, C. E.	R
966	Bishop, G. W.	R
1341	Bodecker, Chas. W.	L

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35 Wood, Louis N.....	M
WRIGHTSTOWN—Brown Co.	
41 Stickles, Geo. W.....	R
236 Popp, Godfrey .....	A

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WYOCENA—Columbia Co.	
809 Townsend, A. J.....	R
853 Irwin, J. G.....	R
864 Riker, Cyrus .....	R

## Non-Resident Pharmacists in Good Standing.

Pharmacists residing outside the State who have paid registration fee for 1890:

<b>ALDEN—Iowa.</b>	
319 David, O. E.....	R
<b>AUSTIN—Minnesota.</b>	
1175 Pierce, W. S.....	L
<b>ASHLAND—Oregon.</b>	
1103 Barrett, J. C.....	L
<b>BRYAN—Ohio.</b>	
1460 Kennedy, Jas. G.....	L
<b>BUTTE CITY—Montana.</b>	
1170 Hoskins, Chas. B.....	L
<b>CHICAGO—Illinois.</b>	
96 Pierson, F. G.....	R
250 Read, F. D.....	R
751 Young, Hays.....	R
817 Parks, Fred. W.....	L
837 Welch, M.....	R
1102 Waugeimann, A.....	L
1163 Windmueller, Emil.....	L
1206 Albrecht, Chas.....	L
1997 Bishop, D. D.....	R
1328 Cannenburgh, Joseph.....	L
1 Regan, J. M.....	M
<b>CEDAR FALLS—Iowa.</b>	
621 Mazanti, W. C.....	G
<b>CONCORDIA—Kansas.</b>	
1020 Letourneau, R. A.....	L
<b>DULUTH—Minnesota.</b>	
1016 Gjesdahl, S.....	L
1143 Kleve, A. E.....	L
<b>DENVER—Colorado.</b>	
1418 Bergwall, Victor.....	G
381 Kearns, P. J.....	A
<b>DAVIS—Illinois.</b>	
59 Rostad, K. T.....	R
<b>ESCANABA—Michigan.</b>	
1293 Voght, Edward C.....	L
<b>EL PASO—Texas.</b>	
1019 Vilas, Walter N.....	L

<b>ELGIN—Illinois.</b>	
235 Strong, Ralph W.....	A
<b>FAIRBAULT—Minnesota.</b>	
1330 Turner, D. D.....	G
<b>FLORISSANT—Missouri.</b>	
1201 Eggers, Gus. C. Jr.....	L
<b>GRAND ISLAND—Nebraska.</b>	
636 Chapman, W. H.....	R
<b>INDIANAPOLIS—Indiana.</b>	
1120 Bump, Louis C.....	L
<b>KANSAS CITY—Missouri.</b>	
1029 Duggan, John.....	L
<b>MINNEAPOLIS—Minnesota.</b>	
1047 Erdman, Chas. A.....	L
1113 Buseth, N.....	L
1298 Hesselberg, E.....	G
1367 Barman, H. E. B.....	L
1385 Johnson, A. E.....	L
1415 Workman, Henry A.....	L
<b>MENOMINEE—Michigan.</b>	
1309 Ellsworth, Albert Jr.....	G
<b>MANISTEE—Michigan.</b>	
1089 Pfefferkorn, B.....	L
<b>MULLAN—Idaho.</b>	
1320 Hageman, R. C.....	L
<b>MENTON—Indiana.</b>	
373 Waters, Frank R.....	A
<b>NUEVO—California.</b>	
Jerman, Thomas.....	R
<b>OWATOMIA—Minn.</b>	
75 Ganeswitz, W.....	A
<b>PAGE CITY—Dakota.</b>	
49 Wall, Geo.....	R
<b>PORTLAND—Oregon.</b>	
1121 Libby, Chas. H.....	L

PERHAM—Minn.		ST. PAUL—Minnesota.	
325 Gattermann, W. A.....	A	157 Shafer, E. G.....	R
RED WING—Minn.		746 Phipps, Geo.....	R
70 Kylo, Ole E.....	A	1199 Babcock, C. H.....	L
ROCKFORD—Illinois.		1363 Weeks, Edw. J.....	L
454 Parmalee, Edw. H.....	R	TACOMA—Washington Territory.	
873 Woodard, W. P.....	L	1370 Searle, C. O.....	L
ST. LOUIS—Missouri.		WILMAR—Kansas.	
1313 Welmar, Henry.....	G	190 Drinker, C. B.....	A
SPRINGFIELD—Missouri.		WAHPETON—Dakota.	
147 Bemis, Jas. W.....	A	805 Wiensma, Chas.....	G
SAULT STE MARIE—Michigan.		WINONA—Minnesota.	
1004 Metzger, V. E.....	L	984 Vaughan, E. A.....	L
SPOKANE FALLS—Washington.		1022 Giese, Henry.....	L
1057 Anger, Otto H.....	L	WASHTA—Iowa.	
SEHOME—Washington.		1126 Mowrer, J. W.....	L
289 Howland, C. S.....	A	WINTHROP—Minnesota.	
		1009 Hackley, Wm. L.....	L

# PHARMACY LAWS OF WISCONSIN.

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CHAPTER 167, LAWS OF 1882, AS AMENDED 1885 AND 1887.

AN ACT to regulate the practice of pharmacy, the licensing of persons to carry on such practice, and the sale of poisons in the State of Wisconsin.

*The People of the State of Wisconsin, represented in Senate and Assembly, do enact as follows:*

SECTION 1, as amended by chapter 146, laws of 1885: "That it shall hereafter be unlawful for any person, other than a registered pharmacist, to retail, compound or dispense drugs, medicines or poisons, except paris green, when kept in stock (put up in pound or half pound packages), or to institute or conduct any pharmacy, store or shop for retailing, compounding or dispensing drugs, medicines or poisons, unless such person shall be a registered pharmacist, or shall employ and place in charge of such pharmacy, store or shop, a registered pharmacist, within the full meaning of this act, except as hereinafter provided."

SEC. 2. In order to be registered within the full meaning of this act, all persons must be either graduates in pharmacy, or shall at the time this act takes effect be engaged in the business of a dispensing pharmacist on their own account, in the State of Wisconsin, in the preparation of physicians' prescriptions, and in the vending and compounding of drugs, medicines and poisons, or shall be licentiates in pharmacy.

SEC. 3. Graduates in pharmacy shall be considered to consist of such persons as have had four years' practical experience in drug stores where prescriptions of medical practitioners are compounded, and have obtained a diploma from such colleges or schools of pharmacy as shall be approved by the board of pharmacy, such as shall be judged by the said board of pharmacy as sufficient guarantee of their attainments and proficiency.

SEC. 4, as amended by chapter 460, laws of 1887: Licentiates in pharmacy shall be such persons as shall have had five years' practical experience in drug stores wherein prescriptions of

medical practioners are compounded and have sustained a satisfactory examination before the state board of pharmacy herein after mentioned. The state board may grant certificates of registration to licentiates of such other state boards as it may deem proper without further examination. It shall be the duty of the said board to grant an assistant's certificate to such persons as have had two years' practical experience in drug stores where prescriptions of medical practioners are compounded and have passed a satisfactory examination before said board of pharmacy, the holder of such assistant's certificate shall, however, be deemed competent to sell, vend and compound on his own account, such medicines as are required by the general public, in towns or villages having less than five hundred inhabitants.

SEC. 5. Immediately upon the passage of this act the Wisconsin Pharmaceutical Association shall elect ten reputable and practicing pharmacists doing business in the state, from which number the governor of the state shall appoint five. The said five pharmacists, duly elected and appointed, shall constitute the board of pharmacy of the State of Wisconsin, and shall hold office as respectively designated in their appointments, for the term of one, two, three, four and five years respectively, as hereinafter provided, and until their successors have been duly appointed and qualified. The Wisconsin Pharmaceutical Society shall annually thereafter elect three pharmacists, from which number the governor of the state shall appoint one to fill the vacancy annually occuring in said board. The term of office shall be five years. In case of resignation or removal from the state of any member of said board, or of a vacancy occuring from any cause, the governor shall fill the vacancy by appointing a pharmacist from the names last submitted, to serve as a member of the board for the remainder of the term.

SEC. 6. The said board shall, within thirty days of its appointment, meet and organize by the selection of a president and secretary from the number of its own members, who shall be elected for the term of one year, and shall perform the duties prescribed by the board. It shall be the duty of the board to examine all applications for registration, submitted in proper form; to grant certificates of registration to such persons as may be entitled to the same under the provisions of this act; to cause the prosecution of all persons violating its provisions; to report annually to the governor and to the Wisconsin Pharmaceutical Society upon the condition of pharmacy in the state, which said report shall also furnish a record of the proceedings of said board for the year, as well as the names of all pharmacists duly registered under this act. The board shall hold meetings for the ex-

amination of applicants for registration and the transaction of such other business as shall pertain to its duties, at least once in three months. And the state board shall give thirty days' public notice of the time and place of such meeting. The said board shall also have power to make by-laws for the proper execution of its duties under this act, and shall keep a book of registration, in which shall be entered the names and places of business of all persons registered under this act, which registration book shall also contain such facts as such persons shall claim to justify their registration. Three members of said board shall constitute a quorum.

SEC. 7. Every person claiming the right of registration under this act, who shall, within three months after the passage of this act, forward to the board of pharmacy satisfactory proof, supported by his affidavit, that he is engaged in the business of dispensing pharmacist on his own account in the state of Wisconsin, at the time of the passage of this act, as provided in section 2, shall, upon the payment of the fee hereinafter mentioned, be granted a certificate of registration; provided, that in case of failure or neglect to register as herein specified, then such person shall, in order to be registered, comply with the requirements provided for registration as graduates in pharmacy or licentiates in pharmacy within the meaning of this act.

SEC. 8. Any person engaged in the position of assistant or clerk in a pharmacy at the time this act takes effect, no less than than eighteen years of age, who shall have had at least two years' practical experience in drug stores where the prescriptions of medical practitioners are compounded, and who furnish satisfactory evidence to that effect to the State Board of Pharmacy, shall, upon making application for registration and upon payment to the secretary of said board of a fee of one dollar, within sixty days after this act takes effect, be entitled to a certificate as "registered assistant," which certificate shall entitle him to continue in such duties as clerk or assistant; but such certificate shall not entitle him to continue in business on his own account; except as provided in section 4, or to the certificate of registered pharmacist, unless he shall have had at least five years' experience in such stores where the prescriptions of medical practitioners are compounded, at the time of the passage of this act. Thereafter he shall pay annually to the said secretary a sum not exceeding fifty cents, during the time he shall continue in such duties, in return for which sum he shall receive a renewal of his certificate.

SEC. 9. Every person claiming registration as a registered pharmacist under section 7 of this act shall, before a certificate is granted, pay to the secretary of the said board of pharmacy the

sum of two dollars, and a like sum shall be paid to said secretary by graduates in pharmacy and by such licentiates of other boards who shall apply for registration under this act; and every applicant for registration by examination shall pay to the said secretary the sum of five dollars before such examination is attempted; provided, that in case the applicant fails to sustain a satisfactory examination by the said board, his money, the said five dollars, shall be refunded to him.

SEC. 10, as amended by chapter 460, laws of 1887. Every registered pharmacist who desires to continue the practice of his profession shall annually, during the time he shall continue such practice, on such date as the board of pharmacy may determine, pay to the secretary of said board a registration fee, the amount of which shall be fixed by the board, and which in no case shall exceed two dollars, in return for which payment he shall receive a renewal of said registration. Every certificate of registration and every renewal of such certificate shall be conspicuously exposed in the pharmacy to which it applies, and if any registered pharmacist or assistant pharmacist shall fail or neglect to conspicuously expose such certificate, he shall be fined not less than five and not more than ten dollars and costs for each and every offense.

SEC. 11. The secretary of the board of pharmacy shall receive a salary which shall be determined by said board; he shall also receive his traveling and other expenses incurred in the performance of his official duties. The other members of said board shall receive the sum of five dollars for each day actually engaged in such service and all legitimate and necessary expenses incurred in attending the meetings of said board. Said expenses shall be paid from the fees and penalties received by said board under the provisions of this act; and no part of the salary or other expenses of said board shall be paid out of the public treasury. All moneys received by said board in excess of said allowances and other expenses hereinbefore provided for, shall be held by the secretary of said board as a special fund for meeting the expenses of said board, said secretary giving such bonds as the said board shall from time to time direct. The said board shall, in its annual report to the Governor and to the Wisconsin Pharmaceutical Association, render an account of all moneys received and disbursed by them pursuant to this act.

SEC. 12, as amended by chapter 460, laws of 1887. Any person not being or not having in his employ a registered pharmacist, within the full meaning of this act, except as provided in section 4, who shall, after the expiration of ninety days from the passage of this act, keep a pharmacy store or shop for retailing, compound-



ing or dispensing medicines, or who shall take, use or exhibit the title of a registered pharmacist, shall, for each and every offense, be liable to a penalty of fifty dollars. Any registered pharmacist or any person who shall permit the compounding and dispensing of prescriptions or the vending of drugs, medicines or poisons in his store or place of business, except under the personal supervision of a registered pharmacist, or except by a registered assistant pharmacist, or any pharmacist or "registered assistant" who, while continuing in business, shall fail or neglect to procure his annual registration, or any person who shall wilfully make any false representation to procure registration for himself or any other person, or who shall violate any other provision of this act, shall, for each and every such offense, be liable to a penalty of fifty dollars; provided, that nothing in this act shall in any manner interfere with the business of any physician in regular practice, or prevent him from supplying to his patients such articles as may to him seem proper, nor with the making and vending of proprietary medicine or medicines placed in sealed packages, with the name of the contents and of the pharmacist or physician by whom prepared or compounded, nor with the sale of the usual domestic remedies by retail dealers, nor with the exclusively wholesale business of any dealers, except as heretofore provided.

SEC. 13. Every proprietor or conductor of a drug store shall be held responsible for the quality of all drugs, chemicals and medicines sold or dispensed by him, except those sold in the original package of the manufacturer, and except those articles or preparations known as patent or proprietary medicines. And should such proprietor or conductor of a drug store, knowingly, intentionally and fraudulently adulterate or cause to be adulterated such drugs, chemicals or medical preparations, he shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be liable to a penalty of not less than seventy-five dollars nor more than one hundred and fifty dollars, and his name stricken from the register.

SEC. 14. No persons shall sell at retail any poisons commonly recognized as such, and especially aconite, arsenic, belladonna, biniodide of mercury, carbolic acid, chloral hydrate, chloroform, conium, corrosive sublimate, creosote, croton oil, cyanide of potassium, digitalis, hydrocyanic acid, laudanum, morphine, nux vomica, oil of bitter almonds, opium, oxalic acid, strychnine, sugar of lead, sulphate of zinc, white precipitate, red precipitate, without affixing to the box, bottle, vessel or package containing the same, and to the wrapper or cover thereof, a label bearing the name of "poison," distinctly shown, together with the name and